

[A] Choose the correct answer from those between brackets:

(1) If $a \in X$, then $\{a\} \dots X^{\backslash}$

(A) \in (B) \notin (C) \subset (D) $\not\subset$

(2) If $[2, a+2] \not\subset \{2, 4, 6, 8\}$, then $a = \dots$

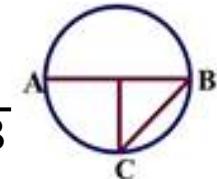
(A) 2 (B) 4 (C) 6 (D) 8

(3) $X \cup X^{\backslash} = \dots$

(A) X (B) X^{\backslash} (C) U (D) \emptyset

(4) The chord of the circle M is \dots

(A) \overline{MC} (B) \overline{BC} (C) \overline{AM} (D) \overline{MB}



(5) if the probability of success pupils is $\frac{8}{10}$ then the probability of the failure is \dots

(A) $\frac{1}{8}$ (B) $\frac{3}{10}$ (C) $\frac{1}{5}$ (D) 1

(6) $4,2 \times \dots = 4200$

(A) 10 (B) 100 (C) 1000 (D) 10000

(7) The set of digits of the number 5533 is \dots

(A) {5533} (B) {55,33} (C) {5,3} (D) {53}

(8) If $X \cap Y = \emptyset$ then X,Y are \dots sets

(A) Equal (B) Intersecting (C) Disjoint (D) Contains

(9) A Square its side length 8,4cm , then its area = cm²

(A) 4,2 (B) 16,8 (C) 70,56 (D) 33,6

(10) $3\frac{1}{8} \simeq \dots$ To the nearest hundredth

(A) 3,15 (B) 3,13 (C) 3 (D) 3,1

(11) The decimal which is included between 0,6 and 0,7 is

(A) 0,71 (B) 0,59 (C) 0,61 (D) 0,72

(12) $19,45 \times 100 \dots$

(A) 0,1945 (B) 1945 (C) 1,945 (D) 194,5

(13) If $X \subset Y$ and $Y \subset X$, then

(A) $X = Y$ (B) $X - Y = X$ (C) $Y - X = Y$ (D) $X \cap Y = \emptyset$

(14) If $\frac{x}{8} = \frac{15}{24}$ then $x = \dots$

(A) 3 (B) 4 (C) 5 (D) 12

[B] Complete:

(15) If $\frac{X}{7} = 1$ then $X = \dots$

(16) The triangle in which there are two equal sides in length is called

(17) $7,81 \times 1000 = 78,1 \times \dots$

(18) $\{2, 5, 7\} \cap \{3, 7, 1\} = \dots$

(19) The diameter length of the circle whose radius 4cm is.....

(20) $8,43 \times 0,9 = \dots \approx \dots$ (to the nearest $\frac{1}{100}$)

(21) The probability of the impossible event is

(22) 7 hour + 44 minute + 60 second = hours

[c] Solve the following problems

(23) If $U = \{1, 2, 3, 4, 5, 6\}$, $X = \{2, 3, 5\}$ and $Y = \{3, 4, 5\}$ Represent The sets by Venn diagram. Then write each the following by listing method

$$X \cap Y, X \cup Y, X - Y$$

(24) Find the product of $58,62 \times 35,2$ and approximate it to the nearest hundredth

(25) A bag contains 5 white balls , 9 red balls , 6 black balls All the ball are identical and equal in size. If a ball is drawn randomly. What is the probability that the drawn ball is (a) white (b) not red .

(26) Draw the isosceles triangle ABC in which $BC = 4$ cm and $AB = AC = 6$ cm Then. draw perpendicular segments from Their vertices to their three sides

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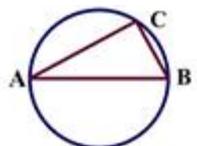
Grade : 5th primary
Subject : Math
Model exam (2)

[A] Choose the correct answer from those between brackets:

(1) 3 $\{2,3\} \cap \{2,4\}$
 (A) \in (B) \notin (C) \subset (D) $\not\subset (2)$

(2) If $U = \{1,2,3,4\}$ and $A^c = \{1,4\}$ then $A = \dots$
 (A) $\{2\}$ (B) $\{3\}$ (C) $\{2,3\}$ (D) \emptyset

(3) In the opposite figure: \overline{AB} is a
 (A) Radius (B) Diameter (C) Chord (D) Circle



(4) If $\frac{2}{5} < \frac{x}{10} < \frac{3}{5}$ then $x = \dots$
 (A) 4 (B) 5 (C) 6 (D) 10

(5) The length of radius of the circle whose diameter of length 8cm. is cm
 (A) 4 (B) 8 (C) 16 (D) 2

(6) $(X^c)^c = \dots$
 (A) X (B) Y (C) U (D) X^c

(7) The probability of the sure event =
 (A) 0 (B) 1 (C) $\frac{1}{2}$ (D) \emptyset

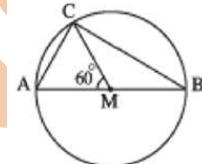
(8) 67 months = years
 (A) 5 (B) 6 (C) 7 (D) 8

(9) $23,4359 \approx \dots$ (to the nearest thousandth)

(A) 23,44 (B) 23,436 (C) 23,4 (D) 23,43

(10) In opposite figure: $AC \dots AM$

(A) $<$ (B) $>$ (C) $=$ (D) Other wise



(11) The probability of any event may equal.....

(A) $\frac{5}{4}$ (B) $\frac{7}{8}$ (C) $\frac{3}{2}$ (D) 1,2

(12) 254 hours $\approx \dots$ day

(A) 11 (B) 10 (C) 9 (D) 8

(13) The smallest fraction in the following is.....

(A) $\frac{1}{3}$ (B) $\frac{5}{8}$ (C) $\frac{2}{9}$ (D) $\frac{2}{5}$

(14) If $U = \{2, 3, 4, 5, 6, 7\}$ then $\emptyset \dots U$

(A) \in (B) \notin (C) \subset (D) $\not\subset$

[B] Complete:

(15) $3 \frac{3}{8} = \dots \approx \dots$ (to the nearest hundredth)

(16) If the probability that a pupil passes an exam $\frac{8}{10}$, then the probability that this pupil fails is

(17) If $7 \in \{2, 5, x + 3\}$ then $x = \dots$

(18) $\frac{2}{7} < \frac{A}{14} < \frac{3}{7}$, then $A = \dots$

(19) If $\{a, 5\} = \{b, 3\}$, then $a + b = \dots$

(20) 1,9 , 2,8 , 3,7 , ,

(21) 5 hour + 29 minute + 60 second = hours

(22) The diameter of the circle of radius 2cm equalscm

[c] Solve the following problems

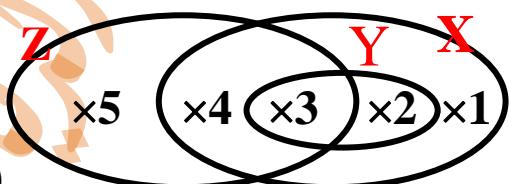
(23) Rearrange the following fractions descending:

$$\frac{1}{2}, 0.8, \frac{1}{4}, 0.3$$

(24) Use the opposite Venn diagram

To write the following sets

$$X \cap Y, X \cup Y, Z - (X \cap Y)$$



(25) The side length of a square is 5,06 meters. Find its area approximating it to the nearest hundredth.

(26) The following table lists the number of 120 volunteers in 3 groups

Group	Distributing	Printing	Design
Number of volunteers	60	30	30

A volunteer has been randomly selected what is the probability to be one of the printing groups?

[A] Choose the correct answer from those between brackets:

(1) If $M = \{5, 2, 3\} \cap \{1, 5\}$, then $M = \{2\}$

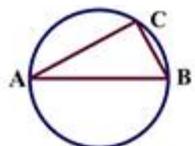
(A) \in (B) \notin (C) \subset (D) $\not\subset$

(2) $345,6\text{cm} \simeq \dots \text{meter}$

(A) 346 (B) 3,456 (C) 3 (D) 4

(3) In the opposite figure: \overline{AC} is a

(A) Radius (B) Diameter (C) Chord (D) Circle



(4) If $\frac{2}{3} < \frac{x}{12} < \frac{5}{6}$ then $x = \dots$

(A) 3 (B) 5 (C) 9 (D) 11

(5) The probability of getting the number zero when tossing Die once is (A) 0 (B) 1 (C) $\frac{1}{2}$ (D) $\frac{1}{6}$

(6) $X^c \cap X = \dots$

(A) X (B) \emptyset (C) U (D) X^c

(7) $172 \times 0,003 \dots 0,172 \times 0,3$

(A) < (B) = (C) > (D) Other wise

(8) A die is tossed ones. The probability of getting a prime number is =

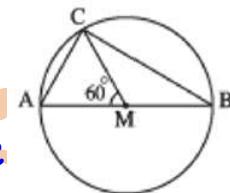
(A) 0,25 (B) 1 (C) \emptyset (D) 0,5

(9) number of altitudes of an obtuse angled triangle is

(A) 0 (B) 1 (C) 2 (D) 3

(10) In opposite figure: $AC \dots CM$

(A) $<$ (B) $>$ (C) $=$ (D) Otherwise



(11) The probability of any event may equal

(A) $\frac{5}{4}$ (B) $\frac{7}{8}$ (C) $\frac{3}{2}$ (D) 1,2

(12) $\{2, 11\}$ set of odd numbers

(A) \in (B) \notin (C) \subset (D) $\not\subset$

(13) The smallest fraction in the following is.....

(A) $\frac{1}{3}$ (B) $\frac{5}{8}$ (C) $\frac{2}{9}$ (D) $\frac{2}{5}$

(14) $\{2, 3, 5\} \cup \emptyset = \dots$

(A) \emptyset (B) $\{2, 3, 5\}$ (C) $\{2\}$ (D) $\{3, 5\}$

[B] Complete:

(15) $4 \frac{1}{3}$ minutes = Seconds

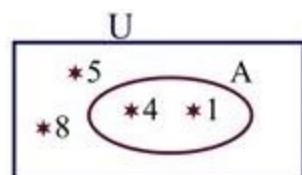
(16) If the probability that a pupil passes an exam $\frac{8}{10}$, then the probability that this pupil fails is

(17) If $5 \in \{3, 2, x\}$ then $x = \dots$

(18) $42,5 + 6,148 = \dots \simeq \dots$ To the nearest $\frac{1}{10}$

(19) If $Y \subset X$ then $Y \cap X = \dots$

(20) In the opposite Venn diagram: $A^{\setminus} = \dots$



(21) $\div 1000 = 8,31$

(22) The longest chord of the circles is

[c] Solve the following problems

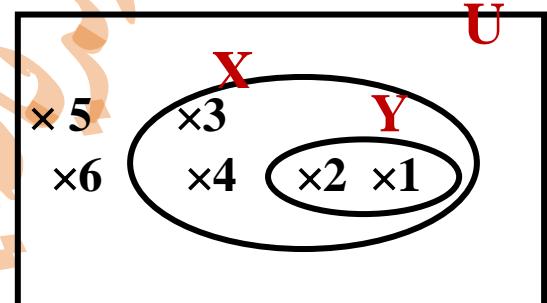
(23) As throwing a fair die once, calculate the probability of:

- (a) appearing a number greater than 6
- (b) an appearing even prime number

(24) Use the opposite Venn diagram

To write the following sets

$$X \cap Y, X \cup Y, X - Y$$



(25) A truck can hold 125 boxes of oranges at a time .How many times are needed to deliver 4375 boxes by that truck?

(26) Draw the triangle XYZ in which $XY = 3 \text{ cm}$, $YZ = 5 \text{ cm}$, $XZ = 7 \text{ cm}$ determine the types of the triangle according to the measures of his angles, draw the perpendicular segments from X to YZ and measure his length

Mathematics Model Answer (1) 5th primary

[A] Answer a question Choose the correct answer

(1) If $a \in X$, then $\{a\} \subset X$

(A) \in

(B) \notin

(C) \subset

(D) $\not\subset$

(2) If $\{2, a+2\} \subset \{2, 4, 6, 8\}$, then $a = 8$

(A) 2

(B) 4

(C) 6

(D) 8

(3) $X \cup X' = U$.

(A) X

(B) X'

(C) U

(D) \emptyset

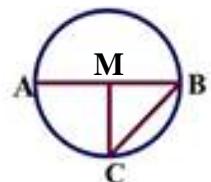
(4) The chord of the circle M is BC.

(A) \overline{MC}

(B) \overline{BC}

(C) \overline{AM}

(D) \overline{AB}



(5) if the probability of success pupil is $\frac{8}{10}$ then the

probability of the failure is $= \frac{2}{10} = \frac{1}{5}$

(A) $\frac{1}{8}$

(B) $\frac{3}{10}$

(C) $\frac{1}{5}$

(D) 1

(6) $4,2 \times 1000 = 4200$

(A) 10

(B) 100

(C) 1000

(D) 10000

(7) The set of digits of the number 5533 is $\{5, 3\}$

(A) {5533}

(B) {55, 33}

(C) {5, 3}

(D) {53}

(8) If $X \cap Y = \emptyset$ then X, Y are Disjoint sets

(A) Equal (B) Intersecting (C) Disjoint (D) Contains

(9) A Square its side length 8,4 cm, then its area = 70,56 cm²

(A) 4,2 (B) 16,8 (C) 70,56 (D) 33,6

(10) $3 \frac{1}{8} \simeq$ 3,13 To the nearest hundredth

(A) 3,15 (B) 3,13 (C) 3 (D) 3,1

(11) The decimal which is included between 0,6 and 0,7 is

0,61 (A) 0,71 (B) 0,59 (C) 0,61 (D) 0,72

(12) $19,45 \times 100 =$ 1945

(A) 0,1945 (B) 1945 (C) 1,945 (D) 194,5

(13) If $X \subset Y$ and $Y \subset X$, then $X = Y$

(A) $X = Y$ (B) $X - Y = X$ (C) $Y - X = Y$ (D) $X \cap Y = \emptyset$

(14) If $\frac{x}{8} = \frac{15}{24}$ then $x =$ $15 \div 3 = 5$

(A) 3 (B) 4 (C) 5 (D) 12

[B] Answer a question Complete:

(15) If $\frac{X}{7} = 1$ then $X =$ 7

(16) The triangle in which there are two equal sides in length is called **Isosceles**

(17) $7,81 \times 1000 = 78,1 \times \underline{100}$

(18) $\{2, 5, 7\} \cap \{3, 7, 1\} = \{\underline{7}\}$

(19) The diameter length of the circle whose radius 4cm is **8cm**

(20) $8,43 \times 0,9 = \underline{7.587} \approx \underline{7.59}$ (to the nearest $\frac{1}{100}$)

(21) The probability of the impossible event is **zero**

(22) 7 hour + 44 minute + 60 second = $\underline{7 \frac{3}{4}}$ hours

[c] Answer a question problems

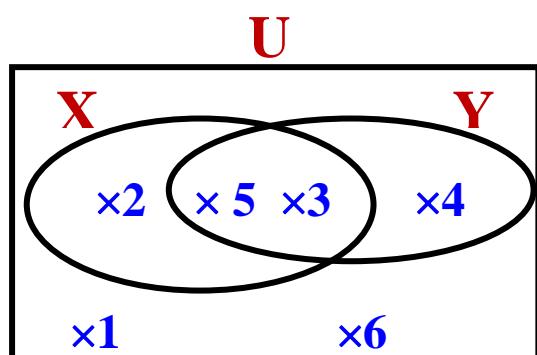
(23) If $U = \{1, 2, 3, 4, 5, 6\}$, $X = \{2, 3, 5\}$ and $Y = \{3, 4, 5\}$ Represent the sets by Venn diagram. Then write each the following by listing method

$X \cap Y$, $X \cup Y$, $X - Y$

$X \cap Y = \{3, 5\}$

$X \cup Y = \{2, 3, 4, 5\}$

$X - Y = \{2\}$



(24) If the price of one mere of cloth is 7.35 pounds,

What is the price of 3.5 meters ?

the price of 3.5 meters

$$= 7.35 \times 3.5 = 25.725 = 26 \text{ pounds}$$

$$\begin{array}{r}
 735 \\
 \times 35 \\
 \hline
 2205 \\
 + 3675 \\
 \hline
 25725
 \end{array}$$

(25) A bag contains 5 white balls , 9 red balls , 6 black balls

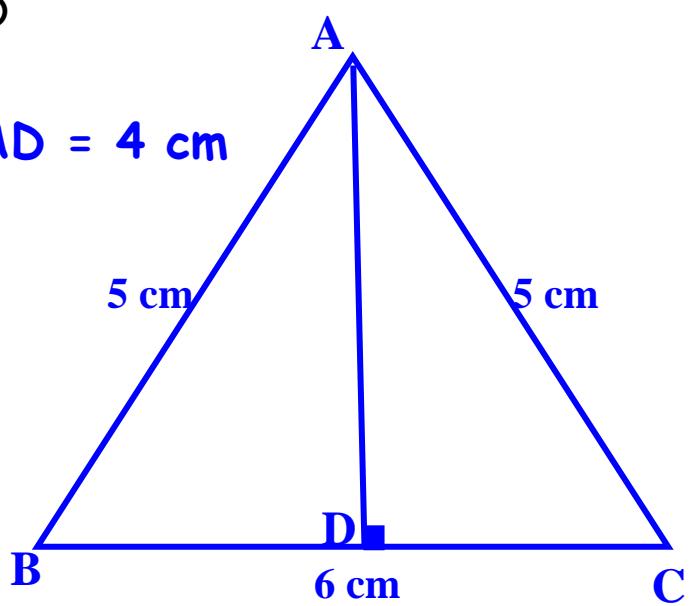
All the ball are identical and equal in size. If a ball is drawn randomly. What is the probability that the drawn ball is (a) white (b) not red .

The probability that the drawn ball is not red = $\frac{5}{20} = \frac{1}{4}$

The probability that the drawn ball is white = $\frac{11}{20}$

(26) Draw the isosceles triangle ABC in which $BC = 6 \text{ cm}$ and $AB = AC = 5 \text{ cm}$ Then. draw perpendicular \overrightarrow{AD} from \overline{BC}
Measure the length of \overline{AD}

Using a measuring ruler $AD = 4 \text{ cm}$



Mathematics Model Answer (2) 5th primary

[A] Answer a question Choose the correct answer

(1) $3 \underline{\in} \{2,3\} \cap \{2,4\}$

(A) \in

(B) \notin

(C) \subset

(D) $\not\subset (2)$

(2) If $U = \{1,2,3,4\}$ and $A^c = \{1,4\}$ then $A = \underline{\{2,3\}}$

(A) $\{2\}$

(B) $\{3\}$

(C) $\{2,3\}$

(D) \emptyset

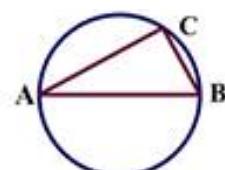
(3) In the opposite figure: \overline{AB} is a Diameter

(A) Radius

(B) Diameter

(C) Chord

(D) Circle



(4) If $\frac{2}{5} < \frac{x}{10} < \frac{3}{5}$ then $x = \underline{5}$.

(A) 4

(B) 5

(C) 6

(D) 10

(5) The length of radius of the circle whose diameter of length 8cm. is 4 cm

(A) 4

(B) 8

(C) 16

(D) 2

(6) $(X^c)^c = \underline{X}$

(A) X

(B) Y

(C) U

(D) X^c

(7) The probability of the sure event = 1.

(A) 0

(B) 1

(C) $\frac{1}{2}$

(D) \emptyset

(8) 69 months \approx 6 years

(A) 5

(B) 6

(C) 7

(D) 8

(9) $23,4361 \approx$ 23.44 (To the nearest hundred)

(A) 23,44

(B) 23,436

(C) 23,4

(D) 23,43

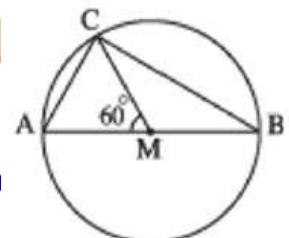
(10) In opposite figure: $AC \underline{=} AM$

(A) <

(B) >

(C) =

(D) Other wise



(11) The probability of any event may equal $\frac{7}{8}$

(A) $\frac{5}{4}$

(B) $\frac{7}{8}$

(C) $\frac{3}{2}$

(D) 1,2

(12) $254 \text{ hours} = 10,583 \approx$ 11 day

(A) 11

(B) 10

(C) 9

(D) 8

(13) The smallest fraction in the following is $\frac{2}{9}$

(A) $\frac{1}{3}$

(B) $\frac{5}{8}$

(C) $\frac{2}{9}$

(D) $\frac{2}{5}$

(14) If $U = \{2, 3, 4, 5, 6, 7\}$ then $\emptyset \underline{\subset} U$

(A) \in

(B) \notin

(C) \subset

(D) $\not\subset$

[B] Answer a question Complete:

(15) $3 \frac{3}{8} = 3,375 \approx 3.38$ (to the nearest hundredth)

(16) If the probability that a pupil passes an exam $\frac{8}{10}$, then the probability that this pupil fails is $\frac{2}{10} = \frac{1}{5}$

(17) If $7 \in \{ 2, 5, x + 3 \}$ then $x = \underline{x+3 = 7 \Rightarrow x = 4}$

(18) $\frac{4}{7} < \frac{A}{14} < \frac{5}{7}$, then $A = \underline{\frac{9}{14}}$

(19) If $\{ a, 5 \} = \{ b, 3 \}$, then $a + b = \underline{3 + 5 = 8}$

(20) 1,9 , 2,8 , 3,7 , 4,6 , 5,5

(21) 5 hour + 29 minute + 60 second = $5\frac{1}{2}$ hours

(22) The diameter of the circle of radius 2cm equals 4 cm

[c] Answer a question problems

(23) Rearrange the following fractions descending:

$$\frac{1}{2}, 0,8, \frac{1}{4}, 0,3$$

$$\frac{1}{2} = 0,5$$

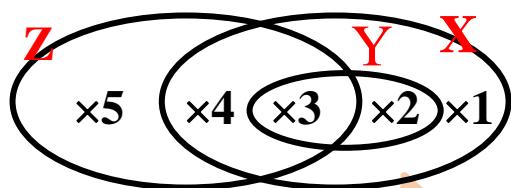
$$\text{and } \frac{1}{4} = 0,25$$

The Rearrange descending 0,8 & 0,5 & 0,4 & 0,25

The Rearrange descending 0,8 & $\frac{1}{2}$ & 0,4 & $\frac{1}{4}$

(24) Use the opposite Venn diagram

To write the following sets



$$X \cap Y, X \cup Y, Z - (X \cap Y)$$

$$X \cap Y = \{ 3, 2 \}$$

$$X \cup Y = \{ 1, 2, 3, 4 \}$$

$$Z - (X \cap Y) = \{ 4, 5 \}$$

(25) The side length of a square is 5,26 meters. Find its area approximating it to the nearest meter.

$$\text{The area} = 5,26 \times 5,26 = 27,6676 \approx 28 \text{ meter}$$

(26) The following table lists the number of 120 volunteers in 3 groups

Group	Distributing	Printing	Design
Number of volunteers	60	30	30

A volunteer has been randomly selected what is the probability to be one of the printing groups?

$$\text{the probability to be one of the printing} = \frac{30}{120} = \frac{1}{4}$$

Mathematics Model Answer (3) 5th primary

[A] Answer a question Choose the correct answer

(1) If $M = \{5, 2, 3\} \cap \{1, 5\}$, then $M \underline{\subset} \{2\}$

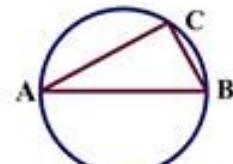
(A) \in (B) \notin (C) \subset (D) $\not\subset$

(2) $345,6 \text{ cm} \simeq \underline{3}$ meter

(A) 346 (B) 34,56 (C) 3 (D) 4

(3) In the opposite figure: \overline{AC} is a Chord

(A) Radius (B) Diameter (C) Chord (D) Circle



(4) If $\frac{2}{3} < \frac{x}{12} < \frac{5}{6} \Rightarrow \frac{8}{12} < \frac{x}{12} < \frac{10}{12}$ then $x = \underline{9}$

(A) 3 (B) 5 (C) 9 (D) 11

(5) The probability of getting prime number is $\underline{\frac{1}{2}}$

(A) 0 (B) 1 (C) $\frac{1}{2}$ (D) $\frac{1}{6}$

(6) $X^c \cap X = \underline{\emptyset}$

(A) X (B) \emptyset (C) U (D) X^c

(7) $172 \times 0,003 \underline{>} 0,172 \times 0,3$

(A) < (B) = (C) > (D) Other wise

(8) The length of radius of the circle whose diameter of length 16 cm. is 8 cm

(A) 4

(B) 8

(C) 16

(D) 2

(9) number of altitudes of an obtuse angled triangle is 3.

(A) 0

(B) 1

(C) 2

(D) 3

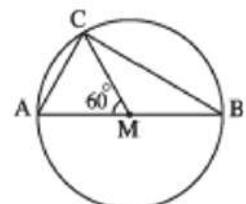
(10) In opposite figure: $CB \underline{<} AB$

(A) <

(B) >

(C) =

(D) Other wise



(11) The probability of any event may equal $\frac{1}{11}$

(A) $\frac{4}{3}$

(B) $\frac{1}{11}$

(C) $\frac{7}{5}$

(D) 1,1

(12) $\{2,11\}$ is not set of odd numbers

(A) \in

(B) \notin

(C) \subset

(D) $\not\subset$

(13) the biggest fraction in the following is $\frac{5}{8}$

(A) $\frac{1}{3}$

(B) $\frac{5}{8}$

(C) $\frac{2}{9}$

(D) $\frac{2}{5}$

(14) $\{2, 3, 5\} \cup \emptyset = \{2, 3, 5\}$

(A) \emptyset

(B) $\{2, 3, 5\}$

(C) $\{2\}$

(D) $\{3, 5\}$

[B] Answer a question Complete:

(15) $4 \frac{1}{3}$ minutes = $4 \times 60 + 20 = 260$ Seconds

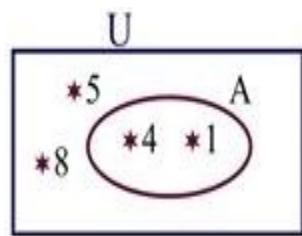
(16) If the probability that a pupil passes an exam $\frac{13}{15}$, then the probability that this pupil fails is $\frac{2}{15}$

(17) If $5 \in \{3, 2, x\}$ then $x = \underline{5}$

(18) $42,5 + 6,148 = \underline{48,648} \simeq 49$ To the nearest $\frac{1}{10}$

(19) If $Y \subset X$ then $Y \cap X = \underline{Y}$

(20) In the opposite Venn diagram: $A^c = \{5, 8\}$



(21) $\underline{8310} \div 1000 = 8,31$

(22) The longest chord of the circles is Diameter

[c] Answer a question problems

(23) As throwing a fair die once, calculate the probability of:

(a) appearing a number greater than 6

(b) an appearing even prime number

(a) appearing a number greater than 6 = 0

(b) an appearing even prime number = $\frac{1}{6}$

(24) Use the opposite Venn diagram

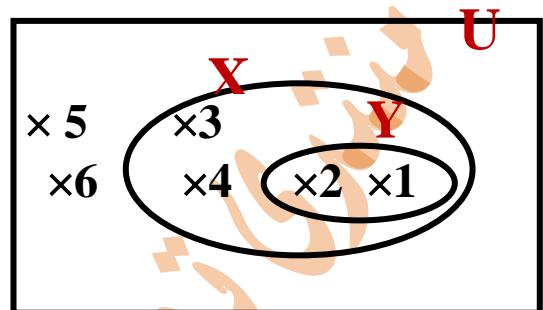
To write the following sets

$$X \cap Y, X \cup Y, X - Y$$

$$X \cap Y = \{ 1, 2 \}$$

$$X \cup Y = \{ 1, 2, 3, 4 \}$$

$$X - Y = \{ 3, 4 \}$$



(25) A truck can hold 125 boxes of oranges at a time .

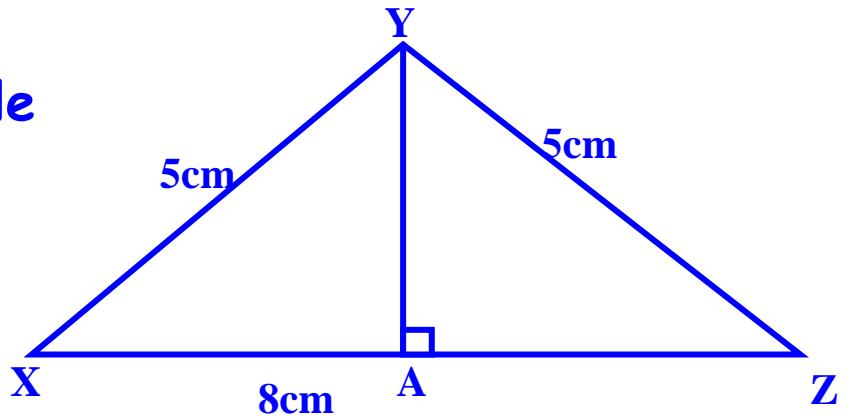
How many times are needed to deliver 4375 boxes by that truck?

$$\text{Number of times needed} = 4375 \div 125 = 35$$

(26) Draw the triangle XYZ in which $XY = 3 \text{ cm}$, $YZ = 5 \text{ cm}$, $XZ = 7 \text{ cm}$ determine the types of the triangle according to the measures of his angles, draw the perpendicular \overline{YA} segments from Y to XZ and measure his length \overline{YA}

The obtuse triangle

$$YA = 3 \text{ cm}$$



[A] Choose the correct answer from those between brackets:

(1) { 3 } { 1 , 3 , 5 }

(A) \in

(B) \notin

(C) \subset

(D) \subsetneq

(2) $135.42 \div 100 = \dots$

(A) 13542

(B) 13,542

(C) 1,3542

(D) 135,42

(3) $\{ 1 , 2 \} \cup \{ 2, 3 \} = \dots$

(A) {2}

(B) { 1 , 3 }

(C) { 1 , 2 , 3 }

(4) $1 \frac{1}{2} \div \frac{1}{4} = \dots$

(A) 2

(B) 6

(C) 12

(D) $\frac{3}{8}$

(5) if the probability of success pupils is $\frac{8}{10}$ then the probability of the failure is
.....

(A) $\frac{1}{8}$

(B) $\frac{3}{10}$

(C) $\frac{1}{5}$

(D) 1

(6) 43 days (to the nearest week) =

(A) 4

(B) 6

(C) 5

(D) 7

(7) The number of subsets of the set $\{4, 5\}$ equals

(A) 2 (B) 3 (C) 4 (D) 5

(8) The quotient of dividing $5,45 \div 0,5 =$

(A) 1,9 (B) 1,09 (C) 10,9 (D) 109

(9) If $U = \{1, 3, 5, 7, 9\}$ then $\{6, 7\} \dots U$

(A) \in (B) \notin (C) \subset (D) $\not\subset$

(10) The number 276,532 to the nearest hundredth =

(A) 277 (B) 276,53 (C) 276,54 (D) 276,5

(11) The tendon passing through the center of the circuit is called the

(A) diameter (B) radius (C) tangent (D) side

(12) $327 \div 24 = 3,27 \div$

(A) 2,4 (B) 0,24 (C) 24 (D) 2004

(13) If $\{2, a + 2\} \not\subset \{2, 4, 6, 8\}$ then $a =$

(A) 2 (B) 4 (C) 6 (D) 8

(14) The number of days in 254 hours equals approximately...

(A) 11 (B) 10 (C) 12 (D) 9

[B] Complete:

(15) If $X = \{ 2 < 4 < 5 \} \cap \{ 5, 3, 7 \}$ then $1 \dots X$

(16) The triangle in which there are two equal sides in length is called

(17) $3,26 \text{ m} = \dots \text{ km}$

(18) If $X \dots Y$ then $X \cap Y = X$

(19) A circle is of diameter length 12 cm. then its radius length = cm.

(20) $8,43 \times 0,9 = \dots \approx \dots$ (to the nearest $\frac{1}{100}$)

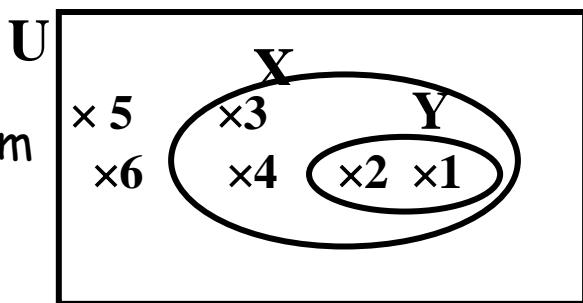
(21) The probability of the sure events is

(22) 7 hour + 59 minute + 60 second = hours

[c] Solve the following problems

(23) Use the opposite Venn diagram
To write the following sets

$$X \cap Y, X \cup Y, X - Y$$



(24) If the price of one mere of cloth is 7.35 pounds,
What is the price of 3.5 meters ?

(25) A bag contains 5 white balls , 9 red balls , 6 black balls
All the ball are identical and equal in size. If a ball is
drawn randomly. What is the probability that the drawn
ball is (a) white (b) not red .

(26) Draw the isosceles triangle ABC which is right angled at
B where AB = 5cm . from B draw the line segment which
Is perpendicular to AC (say BD) and measure its length.

[A] Choose the correct answer from those between brackets:

(1) $22,22 \div 2$

(A) 11,11 (B) 10,01 (C) 22,22 (D) 1,111

(2) $\{2,3,6,12\} \cap$ the set of factors of the number 6 is

(A) $\{2,3,6,12\}$ (B) $\{3,6\}$ (C) $\{4,6\}$ (D) $\{2,3,6\}$

(3) $8,08 \div 8$

(A) 101 (B) 1 (C) 1,01 (D) 10,1

(4) $\{ 34 \} \dots \{ 4, 3 \}$

(A) \in (B) \notin (C) \subset (D) $\not\subset$

(5) If $X \subset Y$ then $X \cap Y = \dots$

(A) X (B) Y (C) \emptyset (D) U

(6) The longest chord in the circle is called a

(A) chord (B) radius (C) tangent (D) diameter

(7) The number of months in half a year =

(A) 6 (B) 3 (C) 5 (D) 9

(8) If $\{7, 10\} \subset \{10, x + 4\}$ then $x =$

(A) 3 (B) 4 (C) 5 (D) 6

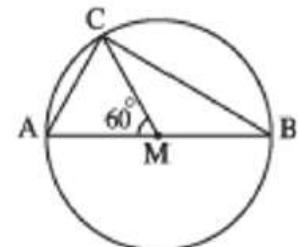
(9) $5 \frac{1}{8} \approx$ (to the nearest hundredth)

(A) 5,125 (B) 5,14 (C) 5,13 (D) 5,1

(10) In opposite figure:

$AC \dots AM$

(A) < (B) > (C) =



(11) $\frac{1}{25} \times 50 \times 0,25 =$

(A) 4 (B) $\frac{1}{4}$ (C) $\frac{1}{2}$ (D) 2

(12) 254 hours \approx day

(A) 8 (B) 9 (C) 10 (D) 12

(13) The smallest fraction in the following is.....

(A) $\frac{1}{3}$ (B) $\frac{5}{8}$ (C) $\frac{2}{9}$ (D) $\frac{2}{5}$

(14) If $U = \{2, 3, 4, 5, 6, 7\}$ then $\emptyset \dots U$

(A) \in (B) \notin (C) \subset (D) $\not\subset$

[B] Complete:

(15) $3 \frac{18}{500} = \dots \approx \dots$ (to the nearest $\frac{1}{100}$)

(16) The triangle which the measures of its angles are 90° , 50° and 40° is called

(17) If $X \subset Y$ then $X - Y = \dots$

(18) The probability that the elephant flies is

(19) 657 Kilometers = meters

(20) 3 the set of factors of the number 18

(21) 5 hour + 29 minute + 60 second = hours

(22) The diameter of the circle of radius 2cm equalscm

[c] Solve the following problems

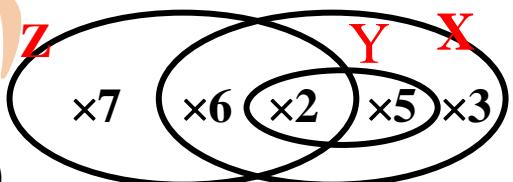
(23) As throwing a fair die once, calculate the probability of:

- (a) appearing a number greater than 6
- (b) an appearing even prime number

(24) Use the opposite Venn diagram

To write the following sets

$$X \cap Y, X \cup Y, Z - (X \cap Y),$$



(25) The length of a piece of cloth is 9,25 m , 12 towels are made of it, the length of each towel is 0,75 m.
How many meters are remainder ?

(26) Draw the triangle ABC in which $AB = 3$ cm. , $BC = 4$ cm. $AC = 5$ cm . then draw the circle M whose diameter is \overline{AC}

[A] Choose the correct answer from those between brackets:

(1) $\{3\} \subset \{1, 3, 5\}$

(A) \in

(B) \notin

(C) \subset

(D) \subsetneq

(2) $135.42 \div 100 = \underline{1.3542}$

(A) 13542

(B) 13,542

(C) 1,3542

(D) 135,42

(3) $\{1, 2\} \cup \{2, 3\} = \underline{\{1, 2, 3\}}$

(A) {2}

(B) {1, 3}

(C) {1, 2, 3}

(D) \emptyset

(4) $1 \frac{1}{2} \div \frac{1}{4} = \underline{6}$

(A) 2

(B) 6

(C) 12

(D) $\frac{3}{8}$

(5) if the probability of success pupils is $\frac{8}{10}$ then the

probability of the failure is $\underline{\frac{1}{5}}$

(A) $\frac{1}{8}$

(B) $\frac{3}{10}$

(C) $\frac{1}{5}$

(D) 1

(6) 43 days (to the nearest week) = $\underline{6}$

(A) 4

(B) 6

(C) 5

(D) 7

(7) The number of subsets of the set $\{4, 5\}$ equals 4

(A) 2

(B) 3

(C) 4

(D) 5

(8) The quotient of dividing $5,45 \div 0,5 =$ 10,9

(A) 1,9

(B) 1,09

(C) 10,9

(D) 109

(9) If $U = \{1, 3, 5, 7, 9\}$ then $\{6, 7\} \subset U$

(A) \in

(B) \notin

(C) \subset

(D) $\not\subset$

(10) The number 276,532 to the nearest hundredth = 276,53

(A) 277

(B) 276,53

(C) 276,54

(D) 276,5

(11) The tendon passing through the center of the circuit is

called the circle diameter

(A) diameter

(B) radius

(C) tangent (D) side

(12) $327 \div 24 = 3,27 \div$ 0,24

(A) 2,4

(B) 0,24

(C) 24

(D) 2004

(13) If $\{2, a + 2\} \subset \{2, 4, 6, 8\}$ then $a =$ 8

(A) 2

(B) 4

(C) 6

(D) 8

(14) The number of days in 254 hours equals approximately 11

(A) 11

(B) 10

(C) 12

(D) 9

[B] Complete:

(15) If $X = \{2, 4, 5\} \cap \{5, 3, 7\}$ then $1 \notin X$

(16) The triangle in which there are two equal sides in length is called Isosceles

(17) $3,26 \text{ m} = \underline{0,00326 \text{ km}}$

(18) If $X \subseteq Y$ then $X \cap Y = X$

(19) A circle is of diameter length 12 cm. then its radius length = 6 cm.

(20) $8,43 \times 0,9 = \underline{7,587} \approx \underline{7,59}$ (to the nearest $\frac{1}{100}$)

(21) The probability of the sure events is $= 1$

(22) 7 hour + 59 minute + 60 second $= 8$ hours

[c] Solve the following problems

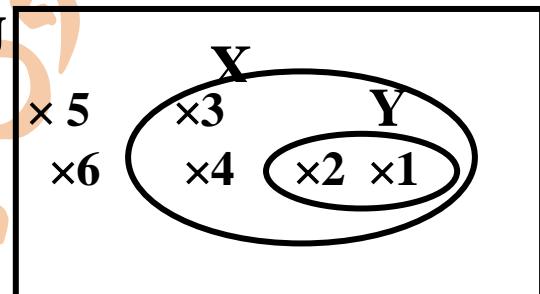
(23) Use the opposite Venn diagram
To write the following sets

$$X \cap Y, X \cup Y, X - Y$$

$$X \cap Y = \{1, 2\}$$

$$, X \cup Y = \{1, 2, 3, 4\}$$

$$, X - Y = \{3, 4\}$$



(24) If the price of one mere of cloth is 7.35 pounds,
What is the price of 3,5 meters ?

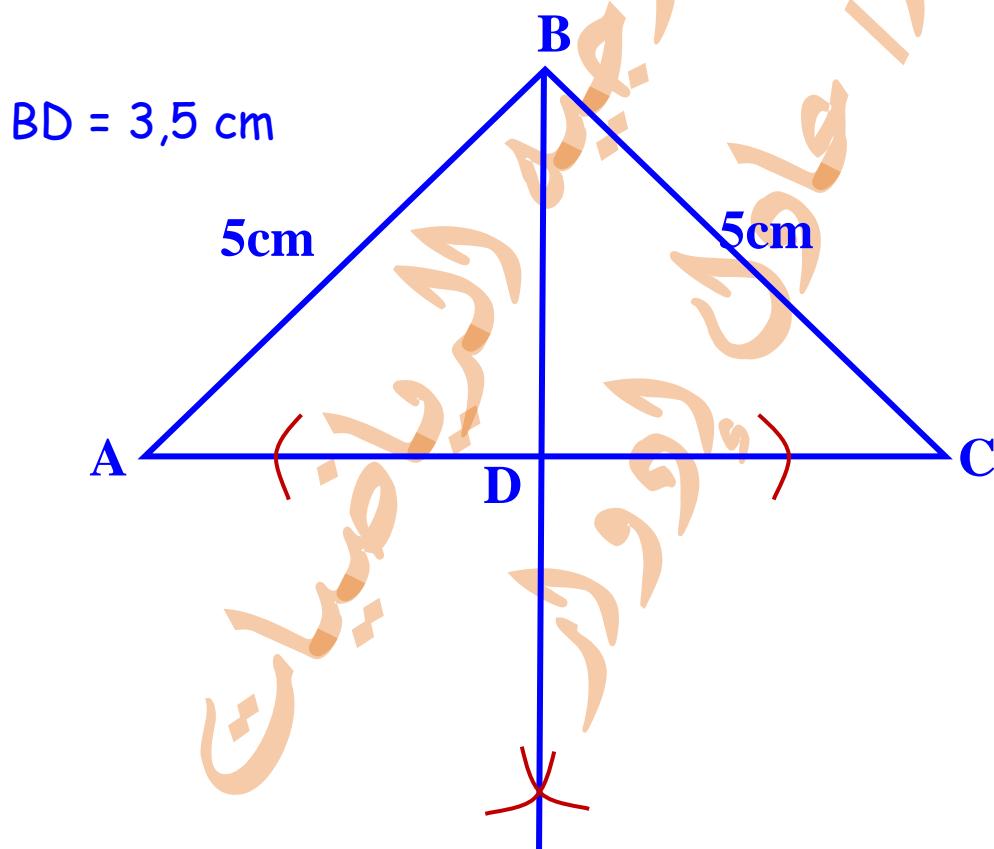
$$\text{Price of cloth} = 7,35 \times 3,5 = 25,725 \text{ pounds}$$

(25) A bag contains 5 white balls , 9 red balls , 6 black balls
All the ball are identical and equal in size. If a ball is drawn randomly. What is the probability that the drawn ball is

(a) the probability that the drawn ball is white = $\frac{5}{20} = \frac{1}{4}$

(b) the probability that the drawn ball is not red = $\frac{11}{20}$

(26) Draw the isosceles triangle ABC which is right angled at B where AB = CB = 5cm . from B draw the line segment which Is perpendicular to \overline{AC} (say \overline{BD}) and measure its length.



[A] Choose the correct answer from those between brackets:

(1) $22,22 \div 2 = \underline{11,11}$

(A) 11,11

(B) 10,01

(C) 22,22

(D) 1,111

(2) $\{2,3,6,12\} \cap$ the set of factors of the number 6 is

{2,3,6,12}

(A) {2,3,6,12}

(B) {3,6}

(C) {4,6}

(D) {2,3,6}

(3) $8,08 \div 8 = \underline{1,01}$

(A) 101

(B) 1

(C) 1,01

(D) 10,1

(4) $\{ 34 \} \underline{\notin} \{ 4, 3 \}$

(A) \in

(B) \notin

(C) \subset

(D) $\not\subset$

(5) If $X \subset Y$ then $X \cap Y = \underline{X}$

(A) X

(B) Y

(C) \emptyset

(D) U

(6) The longest chord in the circle is called a diameter

(A) chord

(B) radius

(C) tangent

(D) diameter

(7) The number of months in half a year $\underline{\underline{=6}}$

(A) 6

(B) 3

(C) 5

(D) 9

(8) If $\{7, 10\} \subset \{10, x + 4\}$ then $x \underline{\underline{=3}}$

(A) 3

(B) 4

(C) 5

(D) 6

(9) $5 \frac{1}{8} = \underline{\underline{5,125}} \approx 5,13$ (to the nearest hundredth)

(A) 5,125

(B) 5,14

(C) 5,13

(D) 5,1

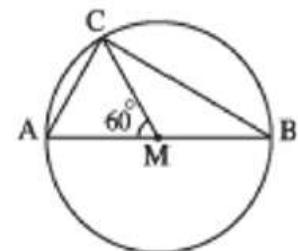
(10) In opposite figure:

$AC \underline{\underline{=}} AM$

(A) <

(B) >

(C) =



(11) $\frac{1}{25} \times 50 \times 0,25 = \underline{\underline{\frac{1}{2}}}$

(A) 4

(B) $\frac{1}{4}$

(C) $\frac{1}{2}$

(D) 2

(12) 254 hours $\underline{\underline{=8,16666}} \approx 8$ day

(A) 8

(B) 9

(C) 10

(D) 12

(13) The smallest fraction in the following is $\underline{\underline{\frac{2}{9}}}$

(A) $\frac{1}{3}$

(B) $\frac{5}{8}$

(C) $\frac{2}{9}$

(D) $\frac{2}{5}$

(14) If $U = \{2, 3, 4, 5, 6, 7\}$ then $\emptyset \underline{\underline{\subseteq}} U$

(A) \in

(B) \notin

(C) \subset

(D) $\not\subset$

[B] Complete:

(15) $3 \frac{18}{500} = \underline{3.036} \approx 3.04$ (to the nearest $\frac{1}{100}$)

(16) The triangle which the measures of its angles are 90° , 50° and 40° is called Right-angled triangle

(17) If $X \subset Y$ then $X - Y = \emptyset$

(18) The probability that the elephant flies is zero

(19) 657 Kilometers = 657000 meters

(20) 3 \in the set of factors of the number 18

(21) 5 hour + 29 minute + 60 second = 5,5 hours

(22) The diameter of the circle of radius 2cm equals 4 cm

[c] Solve the following problems

(23) As throwing a fair die once, calculate the probability of:

(a) appearing a number greater than 6 = Zero

(b) an appearing even prime number = $\frac{3}{6} = \frac{1}{2}$

(24) Use the opposite Venn diagram

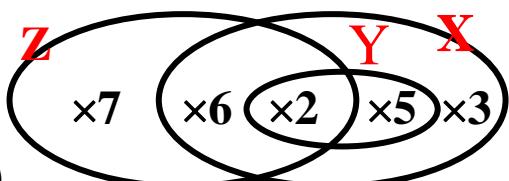
To write the following sets

$$X \cap Y, X \cup Y, Z - (X \cap Y)$$

$$X \cap Y = \{2, 5\}$$

$$X \cup Y = \{2, 3, 5, 6\}$$

$$Z - (X \cap Y) = \{6, 7\}$$

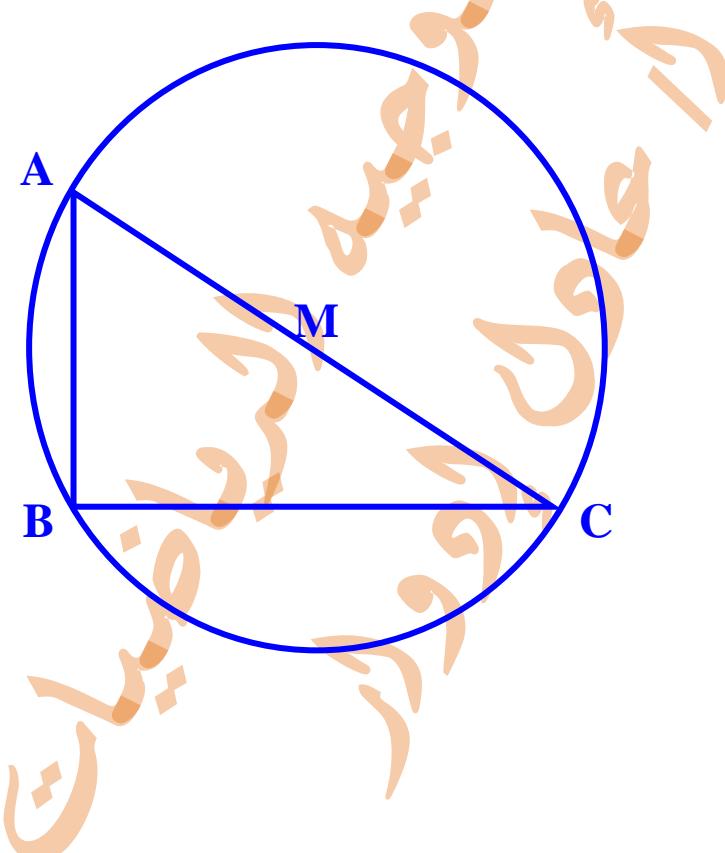


(25) The length of a piece of cloth is 9,25 m , 12 towels are made of it, the length of each towel is 0,75 m. How many meters are remainder ?

$$\text{Length of towels} = 12 \times 0,75 = 9 \text{ m}$$

$$\text{Remaining cloth} = 9,25 - 9 = 0,25 \text{ m}$$

(26) Draw the triangle ABC in which $AB = 3 \text{ cm.}$, $BC = 4 \text{ cm.}$ $AC = 5 \text{ cm.}$ then draw the circle M whose diameter is AC



[A] Choose the correct answer from those between brackets:

(1) { 3 } { 1 , 3 , 5 }

(A) \in

(B) \notin

(C) \subset

(D) \subsetneq

(2) $135.42 \div 100 = \dots$

(A) 13542

(B) 13,542

(C) 1,3542

(D) 135,42

(3) $\{ 1 , 2 \} \cup \{ 2, 3 \} = \dots$

(A) {2}

(B) { 1 , 3 }

(C) { 1 , 2 , 3 } (D) \emptyset

(4) $1 \frac{1}{2} \div \frac{1}{4} = \dots$

(A) 2

(B) 6

(C) 12

(D) $\frac{3}{8}$

(5) if the probability of success pupils is $\frac{8}{10}$ then the probability of the failure is
.....

(A) $\frac{1}{8}$

(B) $\frac{3}{10}$

(C) $\frac{1}{5}$

(D) 1

(6) 43 days (to the nearest week) =

(A) 4

(B) 6

(C) 5

(D) 7

(7) The number of subsets of the set $\{4, 5\}$ equals

(A) 2 (B) 3 (C) 4 (D) 5

(8) The quotient of dividing $5,45 \div 0,5 =$

(A) 1,9 (B) 1,09 (C) 10,9 (D) 109

(9) If $U = \{1, 3, 5, 7, 9\}$ then $\{6, 7\} \dots U$

(A) \in (B) \notin (C) \subset (D) $\not\subset$

(10) The number 276,532 to the nearest hundredth =

(A) 277 (B) 276,53 (C) 276,54 (D) 276,5

(11) The chord which passes through the center of the circle is called a

(A) diameter (B) radius (C) tangent (D) side

(12) $327 \div 24 = 3,27 \div$

(A) 2,4 (B) 0,24 (C) 24 (D) 2004

(13) If $\{2, a + 2\} \not\subset \{2, 4, 6, 8\}$ then $a =$

(A) 2 (B) 4 (C) 6 (D) 8

(14) The number of days in 254 hours equals approximately...

(A) 11 (B) 10 (C) 12 (D) 9

[B] Complete:

(15) If $X = \{ 2 < 4 < 5 \} \cap \{ 5, 3, 7 \}$ then $1 \dots X$

(16) The triangle in which there are two equal sides in length is called

(17) $3,26 \text{ m} = \dots \text{ km}$

(18) If $X \dots Y$ then $X \cap Y = X$

(19) A circle is of diameter length 12 cm. then its radius length = cm.

(20) $8,43 \times 0,9 = \dots \approx \dots$ (to the nearest $\frac{1}{100}$)

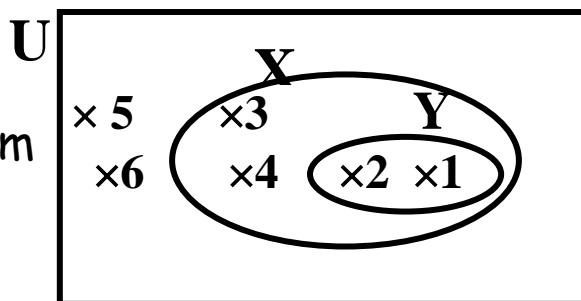
(21) The probability of the sure events is

(22) 7 hour + 44 minute + 60 second = hours

[c] Solve the following problems

(23) Use the opposite Venn diagram
To write the following sets

$$X \cap Y, X \cup Y, X - Y$$



(24) If the price of one meter of cloth is 7.35 pounds,
What is the price of 3.5 meters ?

(25) A bag contains 5 white balls , 9 red balls , 6 black balls
All the ball are identical and equal in size. If a ball is
drawn randomly. What is the probability that the drawn
ball is (a) white (b) not red .

(26) Draw the isosceles triangle ABC which is right angled at
B where AB = 5cm . from B draw the line segment which
Is perpendicular to AC (say BD) and measure its length.

[A] Choose the correct answer from those between brackets:

(1) $22,22 \div 2$

(A) 11,11 (B) 10,01 (C) 22,22 (D) 1,111

(2) $\{2,3,6,12\} \cap$ the set of factors of the number 6 is

(A) $\{2,3,6,12\}$ (B) $\{3,6\}$ (C) $\{4,6\}$ (D) $\{2,3,6\}$

(3) $8,25 \div 8$

(A) 101 (B) 1 (C) 1,01 (D) 10,1

(4) $\{ 34 \} \dots \{ 4, 3 \}$

(A) \in (B) \notin (C) \subset (D) $\not\subset$

(5) If $X \subset Y$ then $X \cap Y = \dots$

(A) X (B) Y (C) \emptyset (D) U

(6) The longest chord in the circle is called a

(A) chord (B) radius (C) tangent (D) diameter

(7) The number of months in half a year =

(A) 6

(B) 3

(C) 5

(D) 9

(8) If $\{7, 10\} \subset \{10, x + 4\}$ then $x =$

(A) 3

(B) 4

(C) 5

(D) 6

(9) $5 \frac{1}{8} \approx$ (to the nearest hundredth)

(A) 5,125

(B) 5,14

(C) 5,13

(D) 5,1

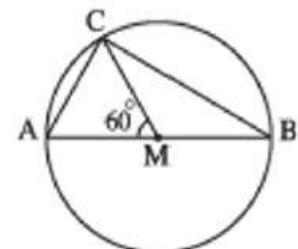
(10) In opposite figure:

AC AM

(A) <

(B) >

(C) =



(11) $\frac{1}{25} \times 50 \times 0,25 =$

(A) 4

(B) $\frac{1}{4}$

(C) $\frac{1}{2}$

(D) 2

(12) 254 hours \approx

(A) 11

(B) 10

(C) 12

(D) 9

(13) The smallest fraction in the following is.....

(A) $\frac{1}{3}$

(B) $\frac{5}{8}$

(C) $\frac{2}{9}$

(D) $\frac{2}{5}$

(14) If $U = \{2, 3, 4, 5, 6, 7\}$ then $\emptyset U$

(A) \in

(B) \notin

(C) \subset

(D) \subsetneq

[B] Complete:

(15) $3 \frac{18}{500} = \dots \approx \dots$ (to the nearest $\frac{1}{100}$)

(16) The triangle which the measures of its angles are 90° , 50° and 40° is called

(17) If $X \subset Y$ then $X - Y = \dots$

(18) The probability that the elephant flies is

(19) 657 Kilometers = meters

(20) 3 the set of factors of the number 18

(21) 5 hour + 29 minute + 60 second = hours

(22) The diameter of the circle of radius 2cm equalscm

[c] Solve the following problems

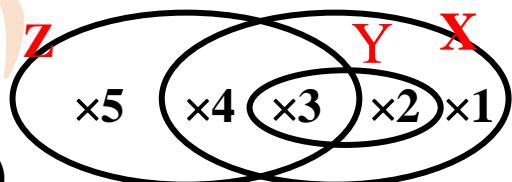
(23) As throwing a fair die once, calculate the probability of:

- (a) appearing a number greater than 6
- (b) an appearing even prime number

(24) Use the opposite Venn diagram

To write the following sets

$$X \cap Y, X \cup Y, Z - (X \cap Y),$$



(25) The length of a piece of cloth is 9,25 m , 12 towels are made of it, the length of each towel is 0,75 m.
How many meters are remainder ?

(26) Draw the triangle ABC in which $AB = 3$ cm. , $BC = 4$ cm. $AC = 5$ cm . then draw the circle M whose diameter is \overline{AC}

(Grade 5) Model (01) First term Jan 2019

[1] Choose the correct answer:

(1) $\frac{7}{80} \simeq \dots$ To nearest thousandths

a) 0.875 b) 0.088 c) 0.087 d) 0.87

(2) The chord which passes through the center of circle is

a) Diameter b) Radius c) Side d) Center

(3) 3 { 13 , 303 }

a) \in b) \notin c) \subset d) $\not\subset$

(4) 3.002 Km = m

a) 0.30020 b) 0.0023 c) 3200 d) 3002

(5) Number of subsets of { 5 } is

a) 5 b) 1 c) 2 d) 4

(6) $3.2 \times 100 \dots 3.2 \div 100$

a) $<$ b) $=$ c) $>$ d) \leq

(7) $\frac{3}{7} = \frac{a}{21}$, then a =

a) 3 b) 9 c) 6 d) 7

(8) If $X \subset Y$, then $X \cup Y = \dots$

a) X b) Y c) U d) \emptyset

(9) $\frac{2}{3} \div 1 \frac{1}{2} =$

a) 1 b) 3 c) $\frac{9}{4}$ d) $\frac{4}{9}$

(10) If { 2 , 4 , 7 } = { 3 , Y , 4 }, then Y =

a) 4 b) 3 c) Zero d) 7

(11) $62160 \div 296 = \dots$

a) 21 b) 201 c) 210 d) 120

(12) Area of square whose side length 3.7 cm = Cm²

a) 14.8 b) 7.4 c) 13.69 d) 21.7

(13) Number of altitudes of isosceles triangle =

a) 1 b) 2 c) 3 d) 4

(14) { 1 , 2 , 3 } - { 2 , 3 } =

a) { 1 , 2 , 3 } b) \emptyset c) { 1 , 2 } d) { 1 }

[2] Complete each of the following with correct answers:

15) If $X = \{ 2, 3 \}$, $Y = \{ 2, 5 \}$, then $X \cup Y = \dots$

16) To draw a circle its diameter 6.4 cm, we open the compasses on cm

17) $2.365 \times 100 = \dots$

18) If $X \subset Y$, then $X - Y = \dots$

19) In an experiment of rolling a die once, the probability of getting a number more than 9 is

20) 5460 Kg = ton

21) $4.6 \times 0.03 = \dots$

22) The triangle whose measures of its angles $30^\circ, 80^\circ, 70^\circ$ is called triangle according to its angles

[3] Answer the following questions:

23) A box contains 15 cards numbered from 1 to 15, if card is drawn randomly, find the probability that the chosen card has :

- ① Number divisible by 7
- ② Even prime number

★★ End of the questions ★★

(Grade 5) Model (02) First term Jan 2019

[1] Choose the correct answer:

(1) $4.3407 \simeq 2.341$ to nearest
 a) Tents b) Hundredths c) Thousandths d) Units

(2) $4.63 \times 1000 = \dots$
 a) 463 b) 4630 c) 46.3 d) 0.00463

(3) $\{ 7 \} \dots \{ 1, 4, 7 \}$
 a) \in b) \notin c) \subset d) \subsetneq

(4) 6 $\{ 44, 55, 66 \}$
 a) \in b) \notin c) \subset d) \subsetneq

(5) The line segment join between two points on the circle is
 a) Chord b) Radius c) Diameter d) Center

(6) $\frac{5}{8} \dots 0.63$
 a) $>$ b) $<$ c) $=$ d) Twice

(7) $6 \div \frac{1}{2} = \dots$
 a) 12 b) 3 c) $\frac{2}{6}$ d) $\frac{6}{2}$

(8) $\frac{3}{5} \times 1 \frac{2}{3} = \dots$
 a) 1 b) $1 \frac{6}{15}$ c) $\frac{23}{35}$ d) $\frac{2}{5}$

(9) $1244 \div 311 = \dots$
 a) 404 b) 44 c) 4 d) 400

(10) $3.96 \div 1.2 = \dots$
 a) 33 b) 3.3 c) 330 d) 0.33

(11) $\{ 6, 4, 1 \} \cap \{ 46, 14, 6 \} =$
 a) $\{ 1 \}$ b) $\{ 6 \}$ c) \emptyset d) $\{ 4 \}$

(12) $\{ 3, 4, 7 \} - \{ 3, 7 \} = \dots$
 a) $\{ 3, 7 \}$ b) \emptyset c) $\{ 4 \}$ d) $\{ 4, 7 \}$

(13) If $\{ 3, 4, 5, 6 \} = \{ 6, X, 5, 3 \}$, then $X = \dots$
 a) 8 b) 7 c) 6 d) 4

(14) If the altitudes of a triangle intersect at point outside the triangle, then measure of greatest angle in this triangle may be =
 a) 70° b) 90° c) 130° d) 180°

[2] Complete each of the following with correct answers:

15) $0.005 \times 0.7 = \dots$

16) $1.9 \times 6 = \dots$

17) $734 \text{ dm} = \dots \text{ m}$

18) If $U = \{4, 5, 6\}$, $X = \{5\}$, then $X^1 = \dots$

19) $\{8, 3\} \cup \{8, 4, 3\} = \dots$

20) If the distance between center of the circle and any point on the circle 4 cm, the length of its diameter =

21) The perimeter of a square is 24 cm, its side is a diameter of a circle, then the radius of this circle = cm

22) In an experiment of rolling a die once, the probability of getting a number more than 6 is

[3] Answer the following questions:

23) $U = \{5, 6, 7, 8\}$, $X = \{6, 7\}$, $Y = \{8, 6\}$ write the following sets in a listing method:

① $X \cap Y = \dots$

② $X - Y = \dots$

③ $X^1 = \dots$

④ $Y^1 = \dots$

24) A chicken farm sold 225 chickens with 10125 L.E. Find the price of each one?

25) A bag contains 2 Yellow balls, 4 blue balls, 3 white balls, all balls are identical and in same size, a ball is chosen randomly, find:

① Probability of chosen a yellow ball

② Probability of chosen a blue or white ball

26) Draw an equilateral $\triangle ABC$ its side length is 4 cm, then draw $\overrightarrow{AD} \perp \overline{BC}$

★★ End of the questions ★★

(Grade 5) Model (03) First term Jan 2019

[1] Choose the correct answer:

(1) $78.5 \times 1000 = \dots$
 a) 7.85 b) 7850 c) 0.785 d) 785

(2) $32.683 \simeq \dots$ to nearest hundredths
 a) 23.68 b) 32.69 c) 32.7 d) 32.68

(3) $\{7, 5\} \dots \{1, 3, 5, 7\}$
 a) \in b) \notin c) \subset d) $\not\subset$

(4) If the radius of a circle is 3 cm, then the length of longest chord = ... cm
 a) 3 b) 6 c) 4.5 d) 12

(5) 3 $\{2, 3, 5\}$
 a) \in b) \notin c) \subset d) $\not\subset$

(6) $\frac{3}{5} \dots \frac{3}{8}$
 a) $>$ b) $=$ c) $<$ d) \leq

(7) $\frac{5}{6} \div 1 \frac{1}{6} = \dots$
 a) $\frac{5}{7}$ b) $\frac{2}{6}$ c) $\frac{5}{6}$ d) $\frac{7}{6}$

(8) $4 \frac{1}{8} \times 2 \frac{2}{3} = \dots$
 a) 1 b) 10 c) 11 d) 111

(9) $5.45 \div 0.5 = \dots$
 a) 10.9 b) 1.09 c) 109 d) 190

(10) If $X \subset Y$, then $X \cap Y = \dots$
 a) X b) Y c) U d) \emptyset

(11) 5.3 Km = ... m
 a) 53 b) 530 c) 5300 d) 53000

(12) $\{5, 2, 7\} - \{2, 7, 6\} = \dots$
 a) $\{7\}$ b) \emptyset c) $\{2\}$ d) $\{5\}$

(13) If $\{3, 6\} = \{1 + X, 3\}$ then $X = \dots$
 a) 2 b) 3 c) 4 d) 5

(14) Number of altitudes of the acute angled - triangle is
 a) 1 b) 2 c) 3 d) 4

[2] Complete each of the following with correct answers:

15) $2.4 \times 4.7 = \dots$

16) $2.37 \times 5 = \dots$

17) $365.25 \div 100 = \dots$

18) $\{2, 4, 7\} \cup \{1, 4, 7\} = \dots$

19) If $U = \{4, 5, 6, 7, 8\}$, $X = \{4, 5, 6\}$ then $X^c = \dots$

20) The midpoint of any diameter in the circle is \dots

21) Any chord passes the center of circle is called \dots

22) If the probability of the successful of a student in math exam 0.8, then the probability of its failure = \dots

[3] Answer the following questions:

23) Find all subsets from $\{5, 6\}$

24) When rolling a die once, then the probability of appear :

① Even number ② number > 5

25) A merchant has 1575 boxes of orange; he wants to carry it in a car which only has 105 boxes. How many cars he need to carry all the boxes?

26) Draw an isosceles $\triangle ABC$ in which $AB = AC = 5$ cm, $BC = 6$ cm, then draw $\overline{AD} \perp \overline{BC}$. Find the length of \overline{AD} ?

★★★ End of the questions ★★

(Grade 5) Model (04) First term Jan 2019

[1] Choose the correct answer:

(1) 43 days \simeq week

a) 4 b) 5 c) 6 d) 7

(2) $327 \div 24 = 3.27 \div$

a) 2.4 b) 0.24 c) 24 d) 2004

(3) $\{34\} \dots \{4, 3\}$

a) \in b) \notin c) \subset d) \subsetneq

(4) $37.563 \simeq 37.6$ to nearest

a) Tenths b) Hundredths c) Thousandths d) Ten thousandths

(5) $2.75 \times 1000 =$

a) 275 b) 27.5 c) 2750 d) 0.0275

(6) Number of subsets of $\{3, 5\} =$

a) 4 b) 5 c) 2 d) 3

(7) If $X \subset Y$, then $X \cap Y =$

a) X b) Y c) \emptyset d) U

(8) If $\{3, 6\} = \{X+1, 3\}$, then $X =$

a) 2 b) 3 c) 4 d) 5

(9) If the longest chord in the circle is 8 cm, then the radius = cm

a) 8 b) 4 c) 16 d) 2

(10) $22.22 \div 11 =$

a) 2.2 b) 2.02 c) 0.22 d) 2

(11) The probability of appear number 5 on upper face when rolling a die once is

a) $\frac{1}{2}$ b) $\frac{1}{6}$ c) $\frac{5}{6}$ d) $\frac{2}{3}$

(12) Its that the sun rises from west.

a) Possible b) Impossible c) Certain d) Expected

(13) $8.25 \div 8\frac{1}{4} =$

a) 101 b) 1 c) 1.01 d) 10.1

(14) $\frac{1}{25} \times 50 \times 0.25 =$

a) 4 b) 0.25 c) 0.5 d) 2

[2] Complete each of the following with correct answers:

15) $\frac{2}{5} = \frac{a}{15}$, then a =

16) $\div 10 = 324$

17) 5.4 ton = Km

18) \emptyset {1, 2, 7}

19) U^1 =

20) The triangle whose angles 20° , 50° , 110° is called

21) Number of altitudes of right angled – triangle =

22) If the probability of success pupils is $\frac{8}{10}$ then the probability of the failure is

[3] Answer the following questions:

23) If the price of cloth is 8.35 L.E, find the price of 4.5 meters

24) If $X = \{1, 4, 3\}$, $Y = \{2, 3, 5\}$ Then: ① $X \cup Y$ = ② $X - Y$ =

25) A die is rolled 100 times, find the probability of appear an odd number

26) Draw triangle ABC, AB = 4 cm, BC = 3 cm, AC = 5 cm. Draw $\overline{AD} \perp \overline{BC}$

★ ★ End of the questions ★ ★

(Grade 5) Model (05) First term Jan 2019

[1] Choose the correct answer:

(1) $6.7891 \simeq \dots$ to nearest thousandths

a) 6.8 b) 6.79 c) 6.789 d) 678.91

(2) $\emptyset \dots Z$

a) \in b) \notin c) \subset d) $\not\subset$

(3) $9.999 \simeq 10.00$ to nearest

a) Unit b) Tenths c) Hundredths d) Hundred

(4) $\frac{31}{8} \dots 3 \frac{7}{8}$

a) $>$ b) $=$ c) $<$ d) \leq

(5) Number of diameter can be drawn from any point on the circle =

a) 1 b) 2 c) 3 d) Infinite

(6) $100 \dots \{0, 2, 4, 6, \dots\}$

a) \in b) \notin c) \subset d) $\not\subset$

(7) $4.5 \text{ m} = \dots \text{ Cm}$

a) 45 b) 0.045 c) 450 d) 0.45

(8) $\frac{15}{3} \times \frac{3}{5} = \dots$

a) 15 b) 3 c) 5 d) $\frac{3}{5}$

(9) If $Y \subset X$, then $Y - X = \dots$

a) X b) Y c) \emptyset d) U

(10) $4069 \div 313 = \dots$

a) 103 b) 13 c) 31 d) 301

(11) $A \cup A^{\complement} = \dots$

a) \emptyset b) U c) A d) A^{\complement}

(12) $1.919 \div 1.9 = \dots$

a) 1.01 b) 101 c) 10.1 d) 11

(13) The shaded part is



a) $Y - X$ b) $Y \cap X$ c) $Y \cup X$ d) X

(14) Point of intersection of altitudes in acute angled – triangle lies

Triangle

a) Inside b) Outside c) On d) On vertex

[2] Complete each of the following with correct answers:

15) The line segment drawn between center of circle and any point on the circle is called

16) If the probability of success pupils is $\frac{11}{13}$ then the probability of the failure is

17) Number of perpendicular line segment of an equilateral triangle =

18) $\frac{4}{3} \approx \dots$ to nearest tenths

19) $\frac{3}{17} \div \frac{9}{17} = \dots$

20) $547.5 \div 1000 = \dots$

21) $\{8, 3\} \cup \{13, 8\} = \dots$

22) If $\{1, 5, b + 4\} \subset \{5, 1, 3, 10\}$, then $b = \dots$

[3] Answer the following questions:

23) If $U = \{X : X \text{ odd number less than } 14\}$, $X = \{1, 3, 5\}$, $Y = \{9, 7, 5\}$ find :

① $Y \cap X$ ② Y^1

24) If the price of one kilogram of apple is 17.5 L.E, find the price of 3.5 KG of same apple?

25) A class has 30 boys and 17 girls. If a pupil is chosen randomly, find the probability that the chosen pupil is a boy.

26) Draw ΔABC an equilateral triangle its side 5 cm, draw $\overline{AD} \perp \overline{BC}$

★★ End of the questions ★★

(Grade 5) Model (06) First term Jan 2019

[1] Choose the correct answer:

(1) $476.532 \simeq \dots$ to nearest hundredths

a) 377 b) 476.53 c) 276.54 d) 674.53

(2) $69.25 \times 10 = \dots$

a) 6925 b) 6.925 c) 692.5 d) 0.6925

(3) 7 $\{ 5, 3, 9 \}$

a) \in b) \notin c) \subset d) $\not\subset$

(4) $\frac{1}{2} \dots \frac{1}{3}$

a) $>$ b) $=$ c) $<$ d) \leq

(5) $\{ 1, 2 \} \dots \{ 21, 12 \}$

a) \in b) \notin c) \subset d) $\not\subset$

(6) $48.6 \div 0.9 = \dots$

a) 9 b) 54 c) 24 d) 34

(7) $4 \frac{1}{8} \times 2 \frac{2}{3} = \dots$

a) 1 b) 10 c) 11 d) 111

(8) $\frac{3}{x} = \frac{18}{24}$

a) 4 b) 6 c) 3 d) 15

(9) $\{ 2, 3, 5, 7 \} \cap \{ 6, 4, 2 \} = \dots$

a) \emptyset b) $\{ 2 \}$ c) $\{ 2, 4 \}$ d) $\{ 6, 2 \}$

(10) If $\{ 3, 6 \} = \{ 5 + x, 3 \}$ then $x = \dots$

a) 1 b) 3 c) 4 d) 5

(11) The diameter in symbol as

a) r b) $2r$ c) π d) r^2

(12) $\{ 2, 3, 4 \} - \{ 2, 5, 8 \} = \dots$

a) \emptyset b) $\{ 2 \}$ c) $\{ 3, 4 \}$ d) $\{ 8, 2 \}$

(13) Any triangle has Altitudes

a) 1 b) 2 c) 3 d) 4

(14) Million is the smallest number formed from digits

a) 6 b) 7 c) 8 d) 9

[2] Complete each of the following with correct answers:

15) $7.6 \times 2.3 = \dots$

16) $38.7 \div 10 = \dots$

17) $46.8 \times 9 = \dots$

18) $\{1, 2\} \cup \{2, 3\} = \dots$

19) The circle is cm

20) If $U = \{1, 2, 3, 4, 5, 6\}$, $Y = \{2, 3, 4, 6\}$, then $Y^c = \dots$

21) To draw a circle its radius 4 cm, we open the compasses on cm

22) Probability of impossible event is cm

[3] Answer the following questions:

23) Write all subset of $\{1, 2, 3\}$

27) A merchant has 1575 boxes of orange; he wants to carry it in a car which only has 105 boxes. How many cars he need to carry all the boxes?

28) A bag contains 4 white balls, 7 red balls, 5 yellow balls, all balls are identical and in same size, a ball is chosen randomly, find:

- ① Probability of chosen a white ball
- ② Probability of chosen a green ball
- ③ Probability of chosen a red or yellow ball

★★ End of the questions ★★

(Grade 5) Model (07) First term Jan 2019

[1] Choose the correct answer:

(1) $3.26 \text{ Km} = \dots \text{ m}$

a) 326 b) 32.6 c) 3260 d) 0.326

(2) $9 \frac{3}{25} \simeq \dots \text{ to nearest tenths}$

a) 0.9 b) 9.2 c) 9.1 d) 9

(3) $\frac{5}{6} \div 1 \frac{1}{6} = \dots$

a) $\frac{5}{7}$ b) $\frac{2}{6}$ c) $\frac{3}{7}$ d) $\frac{7}{6}$

(4) $5.45 \div 0.5 = \dots$

a) 1.9 b) 0.19 c) 1.09 d) 10.9

(5) $4.27 \times 10 \dots 0.427 \times 100$

a) < b) = c) > d) \leq

(6) If $6 \in \{ 3, 5, X \}$, then $X = \dots$

a) 2 b) 3 c) 4 d) 6

(7) The shaded part is \dots

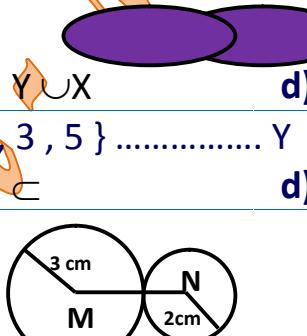
a) $Y \subset X$ b) $Y \cap X$ c) $Y \cup X$ d) X^{\setminus}

(8) If $Y = \{ 2, 3, 5 \} - \{ 1, 3, 5 \}$, then $\{ 1, 2, 3, 5 \} \dots Y$

a) \in b) \notin c) \subset d) \subsetneq

(9) In the opposite figure,

M, N two circles,
then $MN = \dots$



a) 5 b) 6 c) 3 d) 2

(10) The longest chord in the circle is \dots

a) r b) $2r$ c) $3r$ d) $\frac{1}{2}r$

(11) The probability of success pupils is 0.8, the probability of the failure is ..

a) 0.8 b) 0.2 c) 1 d) 0.1

(12) If $X \subset Y$, then $Y - X = \dots$

a) \emptyset b) X c) Y d) Y^{\setminus}

(13) The set of digits of the number 5533 is

a) $\{ 5533 \}$ b) $\{ 55, 33 \}$ c) $\{ 5, 3 \}$ d) $\{ 53 \}$

(14) $4.2 \times \dots = 4200$

a) 10 b) 100 c) 1000 d) 10000

[2] Complete each of the following with correct answers:

15) If $X \subset Y$, then $X \cap Y = \dots$

16) Axis of symmetry in the circle is \dots

17) $4.798 \simeq \dots$ to nearest hundredths

18) If $\{7, 10\} \subset \{10, X + 4\}$, then $X = \dots$

19) $3.75 \times 1000 = \dots$

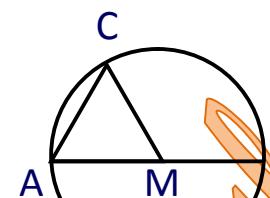
20) $597.8 \text{ cm} \simeq \dots \text{ m}$

21) In the opposite figure:

$$MA = \dots = \dots$$

22) In the opposite figure:

$$Y - X = \dots$$



[3] Answer the following questions:

23) Find the area of rectangle whose length 4.1 cm , width 3.5 cm

24) $77.4 \div 6.45 = \dots$

25) A bag contains 20 balls, 9 red balls, 6 black balls and the rest is white balls, all balls are identical and in same size, a ball is chosen randomly, find:
Probability of chosen a white ball

26) Arrange descending:

$$0.6, \frac{3}{4}, \frac{2}{5}, 0.8$$

★★ End of the questions ★★

(Grade 5) Model (08) First term Jan 2019

[1] Choose the correct answer:

(1) $\{ 7, 3 \} \dots \{ 1, 3, 5, 7 \}$

a) \in b) \subset c) \notin d) \subsetneq

(2) $2.5781 \simeq 2.58$ to nearest

a) Tenth b) Hundredths c) Thousandths d) Unit

(3) The probability of appearance a head when throwing a coin once is

a) 0 b) 1 c) $\frac{1}{2}$ d) $\frac{1}{3}$

(4) The longest chord in the circle is called

a) Chord b) Diameter c) Radius d) Perimeter

(5) Number of subsets for $X \{ 2, 3, 4 \}$ is

a) 16 b) 2 c) 4 d) 8

(6) The prime number 23 divisible by

a) 11 b) 12 c) 23 d) 13

(7) $55.241 \times 100 \dots 522.1 \times 10$

a) $<$ b) $=$ c) $>$ d) \leq

(8) $355 \div 18 \dots 3.55 \div \dots$

a) 1.8 b) 0.18 c) 18 d) 1800

(9) $1.25 \times 3.2 \dots 32 \times 12.5$

a) $>$ b) $=$ c) $<$ d) \leq

(10) Number of altitudes of acute angle triangle is

a) 1 b) 2 c) 3 d) 4

(11) $\frac{5}{8} \dots 0.5734$

a) $>$ b) $<$ c) $=$ d) \leq

(12) $3 \frac{1}{2} \div \frac{7}{12} = \dots$

a) 4 b) 6 c) $\frac{21}{3}$ d) $\frac{50}{21}$

(13) If $6 \in \{ 3, 5, 2X \}$, then $X = \dots$

a) 2 b) 3 c) 5 d) 6

(14) The shaded part is



a) $Y - X$ b) $Y \cap X$ c) $Y \cup X$ d) X

[2] Complete each of the following with correct answers:

15) $4 \frac{1}{8} \times 2 \frac{2}{3} = \dots$

16) If $\frac{a}{8} = \frac{15}{24}$, then $a = \dots$

17) If $X \subset Y$, then $X \cup Y = \dots$

18) $\emptyset \dots \{a, b\}$

19) $7 \dots \{17, 77\}$

20) The triangle whose angles $50^\circ, 90^\circ, 40^\circ$ is called \dots

21) $2.4 \text{ dm} = \dots \text{ cm}$

22) The probability of impossible event $= \dots$

[3] Answer the following questions:

23) If the price of one meter of cloth is 6.45 L.E, find the price of 2.4 meters

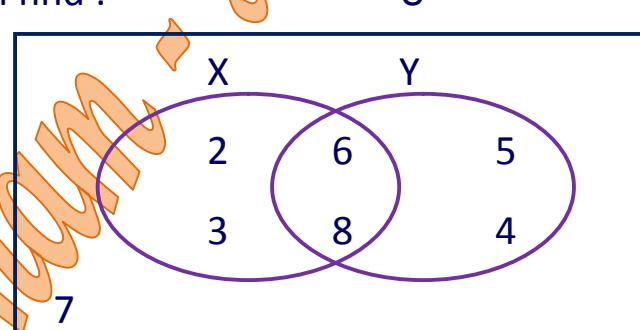
24) From the opposite Venn diagram find :

① $X \cup Y = \dots$

② $X - Y = \dots$

③ $Y \cap X = \dots$

④ $Y^c = \dots$



25) A bag contains 3 white balls, 7 red balls, 5 yellow balls, all balls are identical and in same size, a ball is chosen randomly, find:

① Probability of chosen a white ball

② Probability of chosen a red or yellow ball

26) Draw $\triangle ABC$ an equilateral triangle its side = 5 cm, draw $\overline{BD} \perp \overline{AC}$. Find the perimeter of triangle

★★ End of the questions ★★

(Grade 5) Model (09) First term Jan 2019

[1] Choose the correct answer:

(1) $\{ 9 \} \dots \{ 99, 19 \}$

a) \in b) \notin c) \subset d) $\not\subset$

(2) The altitudes of acute angled triangle intersect at one point lies triangle

a) Inside b) Outside c) On d) In vertex

(3) A circle its diameter = 6 cm , then its radius = cm

a) 3 b) 6 c) 12 d) 4

(4) The value of 7 in the number 43.72 is

a) 7 b) 70 c) 0.7 d) 0.07

(5) $\emptyset \dots \{ 0 \}$

a) \in b) \notin c) \subset d) $\not\subset$

(6) $1 \frac{3}{4} \div \frac{1}{4} = \dots$

a) 7 b) 4 c) 3 d) 1

(7) Number of subsets of $\{ 2, 3 \} = \dots$

a) 2 b) 3 c) 4 d) 5

(8) $25 \frac{1}{4} \times 10 = \dots$

a) 25.25 b) 252.5 c) 2.525 d) 2525

(9) 62 months $\simeq \dots$ years

a) 5 b) 6 c) 7 d) 8

(10) If the probability of a football team win is 4 from 5, then its defeat is

a) $\frac{1}{5}$ b) $\frac{2}{5}$ c) $\frac{3}{5}$ d) $\frac{4}{5}$

(11) The triangle whose angles $90^\circ, 60^\circ, 30^\circ$ is triangle

a) Acute b) Right c) Obtuse d) Straight

(12) 24 kilogram = ton

a) 0.240 b) 0.204 c) 0.042 d) 0.024

(13) The longest chord in the circle is

a) Radius b) Diameter c) Chord d) Center

(14) $\frac{2}{3} \dots \frac{3}{4}$

a) $>$ b) $<$ c) $=$ d) \leq

[2] Complete each of the following with correct answers:

15) $26.48 \div 2 = \dots$

16) $35.475 + 64.34 = \dots \approx \dots$ to nearest 0.1

17) Arrange descending : $0.3, 0.5, \frac{1}{5}, \frac{3}{4}$

 $\dots, \dots, \dots, \dots$

18) $3.65 \div \dots = 365$

19) If $6 \in \{4, 3X\}$, then $X = \dots$

20) The compasses is used to draw a triangle if we know \dots 21) The subset of the sample space is called \dots

22) The quotient of $75.95 \div 0.31 = \dots$

[3] Answer the following questions:

23) From the opposite Venn diagram find :

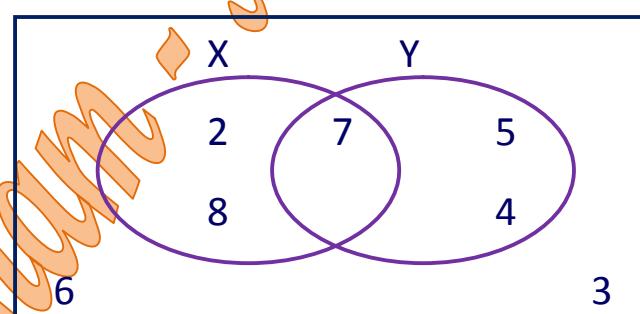
① $X = \dots$

② $X - Y = \dots$

③ $Y \cap X = \dots$

④ $Y^c = \dots$

⑤ $X \cup Y = \dots$



24) Draw a circle M its diameter AB = 6 cm , then draw a chord AC = 4 cm

★★ End of the questions ★★

Grade 5 Model (10) First term Jan 2019

[1] Choose the correct answer:

(1) $3.75 \times \dots = 3750$

a) 10 b) 100c) 1000d) 10000

(2) $475 \div 25 = \dots \div 50$

a) 475 b) 500c) 950d) 450

(3) $39 \text{ days} \simeq \dots \text{ week}$

a) 5 b) 6c) $5 \frac{4}{7}$ d) 7

(4) The right angled triangle has Altitudes

a) 0 b) 1c) 2d) 3(5) If $X \subset Y$ then $X \cap Y = \dots$ a) X b) Yc) Ud) X^1 (6) The quotient of $22.5 \div 1.5 = \dots$ a) 1.5 b) 15c) 0.15d) 500(7) In a circle, if $MA = r$, then point A lies Circlea) Inside b) Onc) Outsided) Otherwise(8) $\{4, 5\} \dots \{2, 3, 5, 7\}$ a) \in b) \notin c) \subset d) \subsetneq

(9) $6 \frac{1}{4} \div 12 \frac{1}{2} = \dots$

a) $\frac{1}{4}$ b) $\frac{1}{2}$ c) $\frac{1}{8}$ d) $\frac{3}{4}$ (10) If $6 \in \{3X, 4, 5\}$, then $X = \dots$ a) 2 b) 3 c) 4d) 6(11) $67.5 - 55.76 = \dots$ a) 117.4 b) 1.174c) 11.74d) 133.26(12) $\{1, 2\} \cap \{3, 4\} = \dots$ a) $\{1, 2\}$ b) $\{3, 4\}$ c) $\{1, 2, 3, 4\}$ d) \emptyset (13) $X - Y \dots Y - X$ a) = b) \neq c) \equiv d) Other wise(14) Number of subsets of $\{4, 5\}$ isa) 2 b) 3c) 4d) 5

[2] Complete each of the following with correct answers:

15) $\emptyset \dots \{a, b\}$

16) $65.35 + 17.025 = \dots \simeq \dots$ to nearest $\frac{1}{100}$

17) The altitudes of obtuse angled triangle intersect at point lies triangle

18) $\{3, 4\} = \{1 + y, 4\}$, then $Y = \dots$

19) The decimal form of fraction $\frac{3}{20}$ is

20) To draw a circle its diameter 6.8 cm, we open the compasses on cm

21) If the probability of a football team win is $\frac{5}{8}$, then the probability of its defeat is

22) If $\frac{b}{8} = \frac{20}{32}$, then $a = \dots$

[3] Answer the following questions:

23) A tin filled with 236.25 of oil is wanted to refill in small bottles each one has 0.75 kg. Find the number of small bottles.

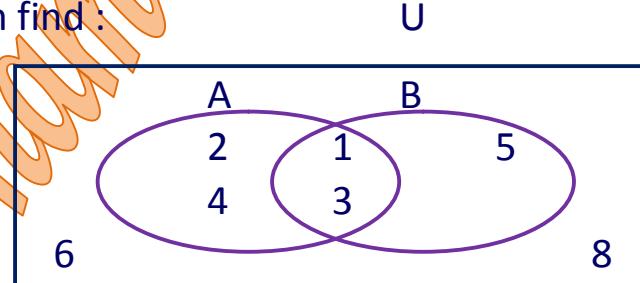
25) From the opposite Venn diagram find :

① $B = \dots$

② $A - B = \dots$

③ $A \cap B = \dots$

④ $A' = \dots$



24) A bag contains 3 white balls, 7 red balls, 5 yellow balls, all balls are identical and in same size, a ball is chosen randomly, find:

① Probability of chosen a yellow ball

② Probability of chosen not red

25) Draw $\triangle ABC$ an equilateral triangle its side = 5 cm. determine the type of triangle according to its angles

=====

★★ End of the questions ★★

(20)

good luck

Grade 5 Model (11) First term Jan 2019

[1] Choose the correct answer:

(1) $4.79 \times \dots = 47900$

a) 10 b) 100c) 1000d) 10000(2) A square its side length 8 cm , then its area = cm²a) 16 b) 32c) 48d) 64(3) 45 days \simeq Weeka) 5 b) 6c) $5 \frac{4}{7}$ d) 7

(4) Number of line of symmetry for square is

a) 1 b) 2c) 3d) 4(5) If $X \subset Y$, then $X \cap Y = \dots$ a) X b) Yc) Ud) \emptyset (6) If $a \in X$ and $a \in Y$, then $a \in \dots$ a) $X \cup Y$ b) $X \cap Y$ c) $X - Y$ d) $Y - X$ (7) If $X \cap Y = \emptyset$, then X , Y are Setsa) Equal b) Intersecting c) Disjointd) Contains(8) $5 \frac{1}{8} \simeq \dots$ (to nearest hundredth)a) 5.125 b) 5.14c) 5.13d) 5.1(9) $\frac{1}{4} \div \frac{1}{2} = \dots$ a) $\frac{1}{4}$ b) $\frac{1}{2}$ c) $\frac{1}{8}$ d) $\frac{3}{4}$ (10) If $9 \in \{ 3, X, 4, 5 \}$, then X =a) 2 b) 3c) 4d) 6

(11) The greatest number of the following is

a) 0.111 b) 0.12c) 0.123d) 1.023(12) $\{ 1, 4 \} \cap \{ 3, 4 \} = \dots$ a) $\{ 4 \}$ b) $\{ 3, 4 \}$ c) $\{ 1, 3 \}$ d) \emptyset

(13) The longest chord in the circle is

a) Diameter b) Radiusc) Chordd) Center(14) Number of subsets of $\{ a, b \}$ isa) 2 b) 3c) 4d) 5

[2] Complete each of the following with correct answers:

15) The probability of sure event is

16) $346.2 \times 0.01 =$

17) Any line segment which joins two points on the circle is called

18) $3 \dots \{ 7, 3 \}$

19) The altitudes of acute angled triangle intersect at one point lies triangle

20) To draw a circle its diameter 10 cm, we open the compasses on cm

21) $54.55 \times 10 =$

22) $\frac{3}{8} \div 3 =$

23) The reciprocal of the number $1 \frac{3}{5}$ is

[3] Answer the following questions:

24) Draw a circle M its diameter XY = 5 cm

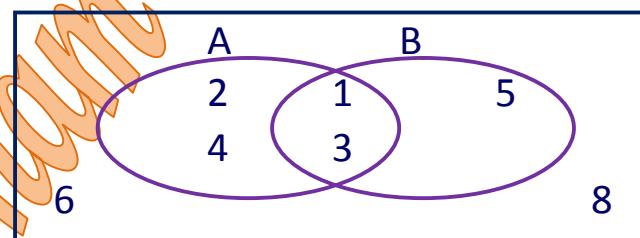
25) From the opposite Venn diagram find :

① $B =$

② $A - B =$

③ $A \cap B =$

④ $A' =$



26) In an experiment of rolling a die once, Find the probability of:

① Getting a number more than 6

② Getting an even number

★★ End of the questions ★★

(Grade 5) Model (12) First term Jan 2019

[1] Choose the correct answer:

(1) \emptyset { 0 }
 a) \in b) \notin c) \subset d) $\not\subset$

(2) $736.25 - 417.34 =$ to nearest tenths
 a) 318.8 b) 318.9 c) 417.8 d) 212.83

(3) A circle its radius is 3 cm, then the length of longest chord =
 a) 3 b) 6 c) 12 d) 4.5

(4) The smallest decimal fraction formed from 7, 5, 3 is
 a) 7.53 b) 0.753 c) 0.357 d) 0.375

(5) { 9 } { 99, 90 }
 a) \in b) \notin c) \subset d) $\not\subset$

(6) The perimeter of an equilateral triangle whose side 4 cm = cm
 a) 7 b) 12 c) 16 d) 40

(7) If $\frac{a}{8} = \frac{15}{24}$, then a =
 a) 4 b) 6 c) 12 d) 15

(8) { 5, 6, 1 } - { 2, 5, 8 } =
 a) { 5 } b) { 6, 1 } c) { 2, 8 } d) { 5, 6, 1, 8 }

(9) $5.7 \times$ = 5700
 a) 10 b) 100 c) 1000 d) 10000

(10) $\frac{3}{4}$ $\frac{2}{3}$
 a) $>$ b) $<$ c) $=$ d) \leq

(11) The quotient of $11664 \div 216 =$
 a) 540 b) 54 c) 504 d) 45

(12) $\frac{1}{2} \div \frac{1}{8}$
 a) 4 b) 16 c) $\frac{1}{4}$ d) $\frac{1}{16}$

(13) 2 { 1, 2, 3 }
 a) \in b) \notin c) \subset d) $\not\subset$

(14) 39 days \simeq week
 a) 4 b) 5 c) 6 d) 7

[2] Complete each of the following with correct answers:

15) $954.36 \div 100 = \dots$

16) If $7 \in \{ 9, 3, X + 2 \}$, then $X = \dots$

17) $1 \frac{1}{2} \div 2 \frac{3}{4} = \dots$

18) $18.8 \times 7.1 = \dots$

19) In an experiment of rolling a die once, the probability of getting an odd number on the upper face is \dots

20) $25800 \text{ gm} = \dots \text{ kg}$

21) The number of altitudes of obtuse angled triangle = \dots

22) The perimeter of square whose sides 8.4 cm is \dots

[3] Answer the following questions:

23) Write all subsets of $X = \{ 6, 4 \}$

24) Packet of papers its height 10.8 cm , if all papers are equal in trickiness and each one 0.09 mm . How many papers in the packet

25) A bag contains 4 white balls, 9 red balls, 3 yellow balls, all balls are identical and in same size, a ball is chosen randomly, find:
 ① Probability of chosen a yellow ball
 ② Probability of chosen not red

26) Draw $\triangle ABC$, $AB = 4 \text{ cm}$, $BC = 3 \text{ cm}$, $AC = 5 \text{ cm}$. then draw $\overline{AD} \perp \overline{BC}$. Find the length of \overline{AD}

★★ End of the questions ★★

(Grade 5) Model (13) First term Jan 2019

[1] Choose the correct answer:

(1) The greatest number of the following is.....

a) 0.0432 b) 0.4 c) 0.099 d) 0.1697

(2) $\frac{3}{5}$ $\frac{5}{3}$

a) $>$ b) $<$ c) $=$ d) \leq

(3) Number of months in quarter year = months

a) 12 b) 8 c) 6 d) 3

(4) { 5 } { 2 , 5 }

a) \in b) \notin c) \subset d) \subsetneq

(5) If lengths of the sides in a triangle are 5 , 5 , 5 cm, then the measure of each angle =

a) 50° b) 15° c) 60° d) 90°

(6) When rolling a die once, the probability of appearance number less than or equal 4 is

a) 1 b) $\frac{1}{6}$ c) $\frac{2}{3}$ d) $\frac{1}{2}$

(7) Number of subsets of { 3 , 4 , 5 } =

a) 6 b) 8 c) 12 d) 16

(8) If $6 \in \{ 3 , 5 , \frac{x}{2} \}$ then $x =$

a) 3 b) 6 c) 10 d) 12

(9) $355 \div 18 = 3.55 \div$

a) 1.8 b) 0.18 c) 18 d) 1800

(10) 10 halves 20 quarters

a) $>$ b) $=$ c) $<$ d) \leq

(11) If $X \subset Y$, then $X \cap Y =$

a) X b) Y c) \emptyset d) U

(12) The diameter of circle whose radius 1.5 cm = cm

a) 1.5 b) 2 c) 3 d) 6

(13) The perpendicular line segment of right angled triangle intersect at point lies

a) Inside triangle b) Outside triangle c) In vertex of right angle d) Other wise

(14) If $a \in X$, then { a } X

a) \in b) \notin c) \subset d) \subsetneq

[2] Complete each of the following with correct answers:

15) Number of altitudes of right angled triangle =

16) $7.25 + 18.025 = \dots \simeq \dots$ to nearest $\frac{1}{100}$

17) $\{3, 7, 0\} \cap \{2, 0, 3\} = \dots$

18) To draw a circle its diameter 4.8 cm, we open the compasses on cm

19) $39 \frac{2}{5} - 7.25 = \dots \simeq \dots$ to nearest unit

20) $1 - 0.979 = \dots \simeq \dots$ to nearest $\frac{1}{100}$

21) $(9.4 \times 0.3) + 2.3 = \dots$

22) The difference between $\frac{31}{500}, 0.031 = \dots$

[3] Answer the following questions:

23) A family consumes 9.5 Kg monthly, if the price of one kilogram is 120 L.E.
How much this family paid every year to nearest pound.

24) Arrange ascending: $0.8, \frac{5}{8}, 0.6, \frac{3}{4}$

25) Find the number if we multiply it by 0.5 the result will be 33.86

26) Draw $\triangle ABC$, $AC = 6 \text{ cm}$, $BC = 5 \text{ cm}$, $m(\angle C) = 120^\circ$
Then draw its three altitudes.

★★★ End of the questions ★★

Grade 5 Model (14) First term Jan 2019

[1] Choose the correct answer:

(1) $\frac{2}{3} \times \frac{3}{4} = \dots$

a) 4

b) $\frac{1}{2}$

c) 2

d) $\frac{1}{4}$

(2) Probability of appearance a prime number when rolling a die once is ...

a) $\frac{1}{2}$

b) $\frac{2}{3}$

c) $\frac{1}{6}$

d) $\frac{1}{3}$

(3) The right angled triangle has Altitudes

a) 1

b) 2

c) 3

d) 4

(4) $\frac{1}{2} \dots \frac{4}{7}$

a) $>$

b) $=$

c) $<$

d) \leq

(5) $29.75 = 29 + \dots$

a) $\frac{1}{2}$

b) $\frac{3}{4}$

c) $\frac{1}{4}$

d) $\frac{5}{z}$

(6) The diameter of circle = $2 \times \dots$

a) 2

b) Chord

c) Radius

d) Diameter

(7) $\frac{8}{10} \div \frac{2}{10} = 80 \div \dots$

a) 10

b) 20

c) 40

d) 2

(8) If $X \subset Y$, then $X \cup Y = \dots$

a) X

b) Y

c) U

d) \emptyset

(9) Number of subsets of {3} is

a) 1

b) 2

c) 3

d) 4

(10) is used for drawing

a) Triangle

b) Protractor

c) Compasses

d) Ruler

(11) 9.6 ton = Kg

a) 960

b) 9600

c) 0.096

d) 0.96

(12) $127 \div 24 = 1.27 \div \dots$

a) 2.4

b) 0.24

c) 24

d) 2004

(13) $4 \frac{3}{8} \simeq \dots$ To nearest hundredths

a) 4.83

b) 4.38

c) 4.37

d) 0.43

(14) $\frac{1}{25} \times 50 \times 0.25 = \dots$

a) 4

b) 2

c) $\frac{1}{4}$

d) $\frac{1}{2}$

[2] Complete each of the following with correct answers:

15) The altitude of a triangle is

16) $3257 \times \dots = 3.257$ 17) $\dots \times 100 = 72.5$

18) The midpoint of any diameter in a circle is of circle

19) Triangle whose angles 54° , 35° , 91° is called triangle20) $2.5 \div \dots = 250$ 21) $\{2, 3, 6, 12\} \cap$ set of factors of number 6 =22) $4 \frac{1}{2} \div 2.5 = \dots$

[3] Answer the following questions:

23) Find the number if we multiply it by 0.37 the result will be 17.8932

24) A bag contains 3 white balls, 7 red balls, 5 yellow balls, all balls are identical and in same size, a ball is chosen randomly, find:

① Probability of chosen a yellow ball

② Probability of chosen ball not red

25) Draw an isosceles $\triangle ABC$ in which $AB = AC = 6$ cm, $BC = 4$ cm, then draw its three altitudes?

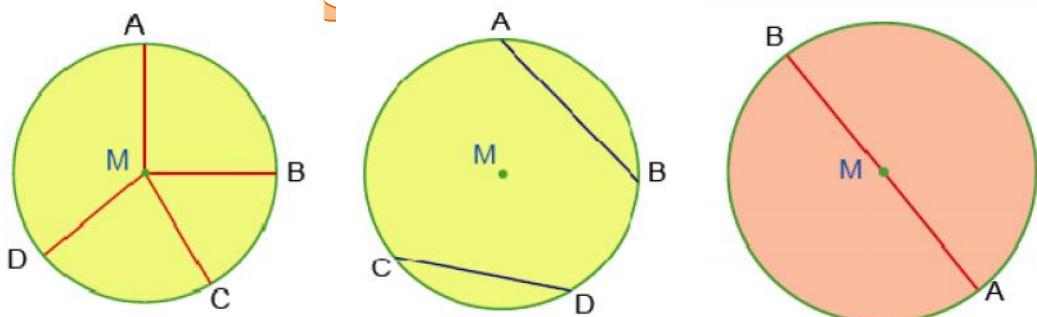
26) If the price of one meter of cloth is 9.35 L.E, find the price of 35 meters

★★ End of the questions ★★

- **The circle:** some of points with constant distance from fixed point, the distance is called radius and the point is called a center of circle.
- **The radius:** is a line segment whose end points are the center of circle and any point \in the circle.
- **The chord:** is a line segment connects between any two points on the circle
- **The diameter:** is a longest chord crosses the center of circle, $D = 2 r$
- **Central angle:** An angle its vertex the center of circle and its sides are radius in the circle.

Remarks

- 1) The diameter is the longest chord in the circle
- 2) The diameter $= 2 \times$ radius
- 3) The circle has infinite numbers of radii
- 4) The circle has infinite numbers of diameters
- 5) The circle has infinite numbers of chords
- 6) Each diameter is a chord but each chord not a diameter
- 7) The diameter divided the circle into two congruent parts.
- 8) All the radii in the circle are equal in length
- 9) A circle can be drawn if we know its radius or diameter



□ **The triangle:** is a polygon with three sides and three angles

□ The types of triangle according to its angles:

- 1) Acute angled – triangle
- 2) Right angle – triangle
- 3) Obtuse angle – triangle

has three acute angles $< 90^\circ$
has a right angle $= 90^\circ$
has obtuse angle $> 90^\circ$

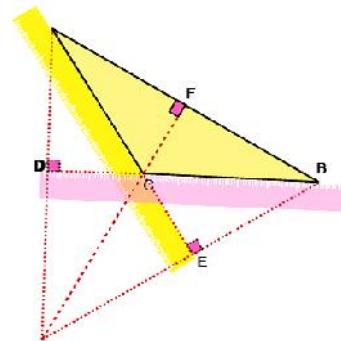
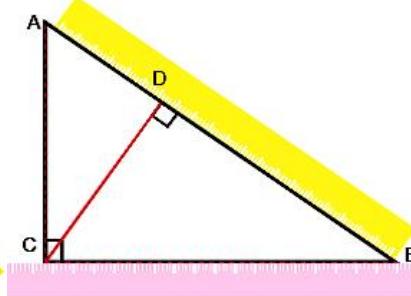
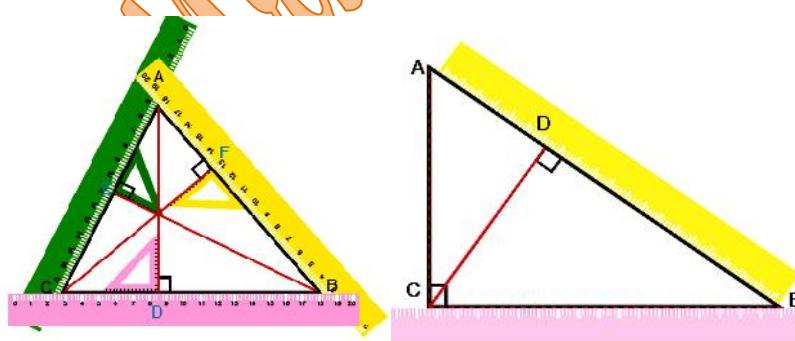
□ The types of triangle according to its sides:

- 1) Equilateral triangle
- 2) Isosceles triangle
- 3) Scalene triangle

has three sides equal in length
has two sides equal in length
has three sides different in length

Remarks

- 1) A Triangle can be drawn if we know the length of two sides and measure of included angle between them
- 2) A Triangle can be drawn if we know measure of two angles and the length of side is drawn between their vertices.
- 3) A Triangle can be drawn if we know the length of its three sides.
- 4) Any triangle has three altitudes
- 5) All the altitudes intersect at one point
- 6) The altitudes of the acute triangle intersect at a point inside the triangle
- 7) The altitudes of the right triangle intersect at a point on the vertex of right angle
- 8) The altitudes of the obtuse triangle intersect at a point outside the triangle



The set: collection of known objects that are clearly defined, and they have a certain property in common.

Express a set:

- Any set can be written in a listing method and it's not important to pay attention to the order of the elements when writing it, and any set doesn't have a repeated elements.
- Any set can be written in a description method in which we define the property which determines the elements in a set.

Finite set: it is a set has limited number of elements can be listed.

Infinite set: it is a set has an unlimited number of elements cannot be listed.

Null set: it is a set has no elements denoted by {} or Ø.

Important laws

- ↙ Perimeter of any polygon = The sum of lengths of its sides
= the length of the line of closed curve
- ↙ Perimeter of triangle = sum of lengths of its three sides.
- ↙ Perimeter of equilateral triangle = Side length \times 3
- ↙ Perimeter of Square = Side length \times 4
- ↙ Perimeter of Rhombus = Side length \times 4
- ↙ Perimeter of rectangle = (length + width) \times 2
↳ Length + width = Perimeter of rectangle \div 2
- ↙ Circumference of circle = $2 \pi r = \pi d$ $(\pi = 3.14 \text{ or } \frac{22}{7})$
- ↙ Diameter = Circumference $\div \pi$
- ↙ Radius = Circumference $\div 2 \pi$

Math

Model Exam (1)

Question 1:

- Answer the following:

a- $65.3814 + 63.4027 = \dots \simeq \dots$ (to the nearest $\frac{1}{1000}$)

b- $53.27 - 2.1 = \dots \simeq \dots$ (to the nearest tenth)

c- $(3.425 + 1.07) \div 2.8 = \dots \simeq \dots$ (to the nearest hundredth)

d- $9.568 \div 9 \frac{1}{5} = \dots \simeq \dots$ (to the nearest whole number)

e- $\dots \div 9 = 4.5$

f- The chord of a circle is a line segment that connects

g- 2.9 ton = kg

h- A box contain 24 lamps, 3 lamps are defective. A lamp has been randomly selected, the probability of getting a functional lamp =

i- If $X = \{2, 3\}$, $Y = \{3, 5\}$, then $X \cap Y = \dots$

j- 254 hours $\simeq \dots$ days

Question 2:

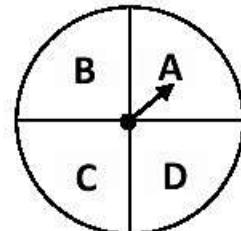
A) The area of a rectangle is 9.43 cm^2 and its width is 2.45 cm. find its length and approximate it to the nearest hundredth of centimeter.

Math

B) Compare:

a- $0.46 \div 4.6$	<input type="text"/>	0.01
b- 17.17×1.7	<input type="text"/>	39
c- $53.7 \div 3.5$	<input type="text"/>	$5.37 \div 0.35$
d- $845 \div 4.9$	<input type="text"/>	$(84.5 \div 49) \times 0.1$

Question 3:



A) A spinner is divided into 4 equal sections.

a- What is the probability of spinning the letter B?

b- Spin the spinner 400 times. What is the predicted number of getting letter A?

B) Draw a circle whose centre is M and radius is 2.5 cm. then draw its diameter \overline{AB} and draw its chord \overline{AC} of length 3 cm. Draw \overline{BC} then find its length.

Question 4:

A) If $U = \{1, 2, 3, 4, 5, 6\}$, $X = \{2, 3, 5\}$ and $Y = \{3, 4, 5\}$

Represent the sets by Venn diagram. Then write each of the following by listing method:

- a) $X \cup Y$
- b) $X \cap Y$
- c) $X - Y$
- d) X'

B) Find the product of 58.62×35.2 and approximate it to the nearest hundredth.

Math

Question 5:

- **Choose the correct answer:**

a- The number of subsets for the set $\{5\}$ is (0 – 1 – 2 – 3)

b- If M is a circle whose diameter is 8 cm where $MA = 7 \text{ cm}$ then the point A is located (inside – outside – on) the circle.

c- $654 \div 76 = 6.54 \div \dots$ (76 – 0.76 – 7.6)

d- If $X \subset Y$ then $X \cap Y = \dots$ (X – Y – \emptyset – U)

e- $\emptyset \dots \{0\}$ (= – \subset – $\not\subset$ – \in)

Question 6:

A) Draw the isosceles triangle ABC in which $BC = 4 \text{ cm}$, and $AB = AC = 6 \text{ cm}$
Then, draw perpendicular segments from their vertices to their three sides.

B) The following table lists the results of a survey applied on 100 spectators of T.V

Program	Arabic films	Foreign films	Series	News	Football matches
Number of spectators	19	20	15	10	36

A spectator has been randomly selected. Find the probability of selecting a spectator prefers:

a- Football matches b- foreign films c- series d- news

Math

Model Exam (2)

Question 1:

- Find the following:

a- $729.72 - 122.7435 = \dots \simeq \dots$ (to the nearest hundredth)

b- $1.623 \div 0.152 = \dots \simeq \dots$ (to the nearest tenth)

c- $984.45 + 73.2 = \dots \simeq \dots$ (to the nearest unit)

d- $1.775 \times 0.15 = \dots \simeq \dots$ (to the nearest $\frac{1}{1000}$)

e- $4\frac{1}{2} \div 0.5 = \dots$

f- $X \in \{2, 5\} \cap \{3, 5\}$, then $X = \dots$

g- $8.56 \text{ m} = \dots \text{ km}$

Question 2:

A) A card has been randomly drawn out of 10 cards numbered from 1 to 10

Find the probability of getting:

- a- An odd number
- b- A prime number
- c- An even number greater than 6

B) Draw the triangle ABC in which $AB = 7 \text{ cm}$, $BC = CA = 6 \text{ cm}$. then, draw

the line segment from point C that is perpendicular to \overline{AB} and find its length.

Math

Question 3:

A) Complete:

a- If $\{1, X\} = \{2, Y\}$, then $X = \dots$, $Y = \dots$

b- The longest chord in a circle is called \dots

c- The probability of failing a student is $\frac{2}{15}$, The probability of success = \dots

d- 72 days $\simeq \dots$ weeks

e- $\{2, X\} \cap \{3, 7\} = \{3\}$, then $X = \dots$

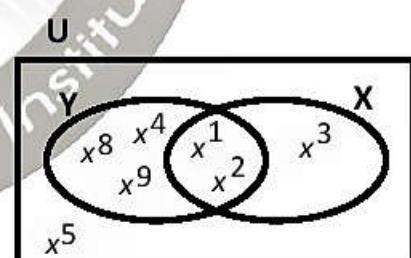
f- The difference between $\frac{9}{16}$ and 0.5734 is \dots

B) The area of a rectangle is 10.25 square meters, and its length is 4.1 meters. Find its width and perimeter.

Question 4:

A) Look at the opposite Venn diagram and find the following sets using the listing method:

a) $X \cup Y$ b) $X \cap Y$
 c) $X - Y$ d) Y'
 e) $(X \cup Y)'$



B) Find the number that if multiplied by 0.37 , then the result is 17.8932

Math

C) Choose the correct answer:

a- The number of altitudes in any triangle = (1 – 2 – 3)

b- {1,7} {0, 1, 2, 3, 4, ... } (€ – € – € – €)

c- $12 \frac{1}{2} \times \frac{4}{5} = \dots$ (10 – 100 – 50)

d- If \overline{AB} , \overline{AC} are two chord in a circle, then \overline{BC} is a(chord – diameter – radius) in the same circle.

e- $5698.65 \div 100 = \dots$ (569865 – 56.9865 – 5.69865)

f- $X - X = \dots$ (Ø – zero – {0} – {1})

Question 5:

A) Rolling a regular number cube (die). what is the probability of getting an even number and not divisible by 3?

B) Put (✓) for the true sentence and (✗) for the false one:

a- The quotient of dividing 265.88 by 2.6588 = 100 ()

b- The length of the diameter of a circle > the length of any chord which doesn't pass through its center ()

c- $8 \in \{5, 7\}$ ()

d- $439.71 \times 1000 = 439710$ ()

e- The line segments drawn from the vertices of the acute triangle perpendicular to the opposite sides intersect at one point inside the triangle. ()

Math

Question 6:

A) Draw a circle whose center is N and diameter is 6 cm. then draw the diameter \overline{AB} and the chord \overline{AC} in the circle. Draw \overline{BC} . Use the protractor to measure $\angle ACB$, then draw $\overrightarrow{CD} \perp \overline{AB}$ that intersects it at D and the circle at E , then choose the correct answer:

a- The triangle ABC is

(right triangle – acute triangle – obtuse triangle)

b- \overline{CE} is in the circle (chord – diameter – radius)

c- The intersection point of the perpendicular line segments drawn from the vertices of the triangle ABC to the opposite sides is ...

(C – D – E)

B) Divide 375 by 0.5 then add $5 \frac{1}{4}$ to the quotient.

Math

Model Exam (3)

Question 1:

- Find the following:

a- $75.32489 \times 10 = \dots \simeq \dots$ (to the nearest thousandth)

b- $12.46 \div 0.517 = \dots \simeq \dots$ (to the nearest tenth)

c- $700.14 + 55.009 = \dots \simeq \dots$ (to the nearest unit)

d- $7.52 \div (14.73 - 11.58) = \dots \simeq \dots$ (to the nearest $\frac{1}{100}$)

e- $2\frac{1}{8} \div 0.125 = \dots$

f- If $4 \in \{2, X, 7\}$, then $X = \dots$

g- The midpoint of any diameter in a circle is of the circle.

h- A card has been drawn out of 5 cards containing the numbers:

32

25

14

63

27

The probability of selecting a number that the sum of its two digits is 9 =
.....

Question 2:

A) Draw the triangle XYZ in which $XY = 3 \text{ cm}$, $YZ = 5 \text{ cm}$, $ZX = 7 \text{ cm}$.

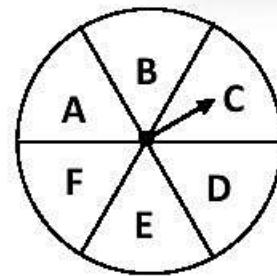
determine the types of the triangle according to the measures of its angles, then draw the perpendicular segment from X to \overline{YZ} and measure its length.

Math



B) A spinner is divided into 6 equal sections.

a- What's the probability of spinning on any section?
b- Spinning the spinner 60 times. How many times are predicted to get the letter (A) as an outcome?



Question 3:

A) Rearrange the following fractions descendingly: $\frac{1}{2}$, 0.8 , $\frac{1}{4}$, 0.3

B) The side length of a square is 5.06 meters.

Find its area approximating it to the nearest hundredth.

C) If $X = \{3, 4, 5\}$, $Y = \{2, 3, 4\}$

Place the suitable symbol \in or \notin or \subset or $\not\subset$ in the blanks.

a- 2 X d- $\{3, 5\}$ $X \cap Y$
b- $\{3, 2\}$ $X \cup Y$ e- 5 $X - Y$
c- \emptyset Y f- $\{2, 3, 4\}$ X

Question 4:

A) The following table lists the number of 120 volunteers in 3 groups to make uniforms for cleaners.

Group	Design	Printing	Distribution
Number of volunteers	30	30	60

A volunteer has been randomly selected. What is the probability to be one of the printing group?

B) A truck can hold 125 boxes of oranges at a time. How many times are needed to deliver 4375 boxes by that truck?

Math

Question 5:

A) Choose the correct answer from the parentheses:

a- If $\{2, 5, 7\} = \{5, A, 2\}$ then $A = \dots$ (2 – 5 – 7 – 0)

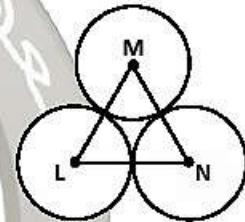
b- If A, B belong to the circle M where $M \in \overline{AB}$ then \overline{AB} is called (chord – diameter – radius) in the circle. a

c- $78.26 \div 10 \dots 7.826 \times 10$ (> or = or <)

d- $\{5\} - \{1, 2, 5\} = \dots$ ($\{5\} - \{1, 2\} - \emptyset - \{1, 2, 5\}$)

e- If $a \in X$ then $a \dots X$ ($\in - \notin - \subset - \not\subset$)

f- In the opposite figure,
If the length of each radius in the three circles is 3 cm, then the perimeter of the triangle MLN = (6 – 9 – 18) cm



B) Draw a circle whose center is M and radius 2 cm then draw two radii \overline{MX} , \overline{MY} and the included angle between them measures 60° then draw \overline{XY} and find the length of \overline{XY} .

Math

Model Exam (4)

Answer the following questions :

1 Complete each of the following :

[a] $457.6 \div 100 = \dots \simeq \dots$ (to the nearest tenth)

[b] If $X \subset Y$, then $X \cup Y = \dots$

[c] $\frac{5}{7} \times \dots = 1$

[d] If $\{2, x+1\} = \{6, 2\}$, then $x = \dots$

2 Choose the correct answer:

[a] $\{43\} \cap \{4, 3\}$ ($\{3\}$ or $\{4\}$ or $\{43\}$ or \emptyset)

[b] If the length of the radius of a circle is 5 cm. , then the length of the longest chord = cm. (2 or 8 or 6 or 10)

[c] Any triangle has altitudes (1 or 2 or 3 or 4)

[d] $12 \div \frac{4}{3} =$ (9 or 16 or 6 or 8)

3 [a] Find the result then approximate :

(1) $4.52 \times 0.3 = \dots \simeq \dots$ (to the nearest 2 decimal place)
(2) $24.7 - 7 \frac{1}{2} = \dots \simeq \dots$ (to the nearest unit)
(3) $2.46 \div 0.6 = \dots$

[B] Arrange in an ascending order :

7.8 , 7.75 , $6\frac{1}{4}$ and 6.4

4 [a] If $U = \{1, 2, 3, 4, 5, 6, 7, 8\}$, $X = \{2, 4, 5, 6\}$ and $Y = \{4, 5, 7\}$

Represent these sets by Venn diagram then find Δ .

(1) $X \cap Y$ (2) $X \cup Y$
 (3) $X - Y$ (4) X'

[b] Complete using $(\in, \notin, \subset \text{ or } \not\subset)$:

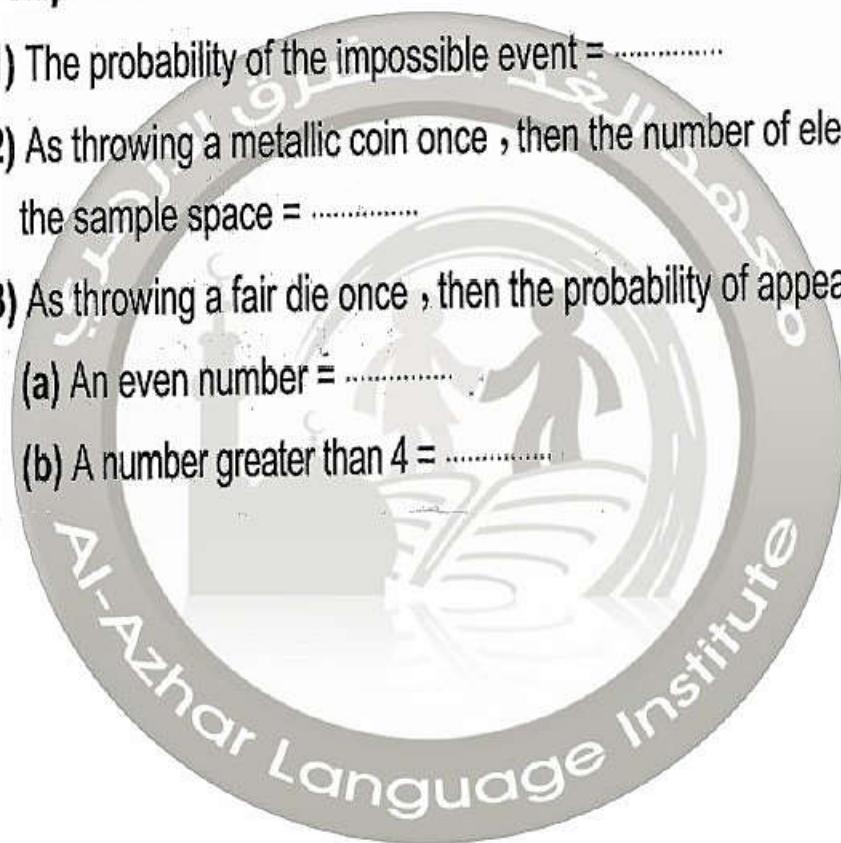
(1) 9 $\{4, 6, 9\}$ (2) $\{8\}$ $\{0, 2, 4, 6, \dots\}$
(3) \emptyset $\{0\}$

Math

5 [a] Draw the triangle ABC in which $AB = 8 \text{ cm.}$, $BC = 6 \text{ cm.}$ and $AC = 10 \text{ cm.}$, then complete : $m(\angle B) = \dots \text{ }^\circ$

[b] Complete :

- (1) The probability of the impossible event =
- (2) As throwing a metallic coin once , then the number of elements of the sample space =
- (3) As throwing a fair die once , then the probability of appearing :
 - (a) An even number =
 - (b) A number greater than 4 =



Model Exam (5)

Answer the following questions :

1 Complete :

[a] \emptyset {a, b} [b] It is that the sun rises from west.
 [c] As throwing a fair die once, then the probability of appearing
 a number less than 3 is
 [d] The altitudes of the right-angled triangle intersect at

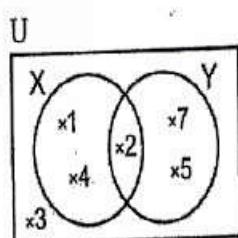
2 Choose the correct answer :

[a] $63.594 \approx 63.6$ (to the nearest)
 (0.1 or 0.01 or 0.001 or 10)
 [b] $3\frac{1}{2} \div \frac{7}{12} = \dots$ (6 or $\frac{18}{2}$ or $\frac{50}{12}$ or 4)
 [c] $3 \dots \{303, 13\}$ (\in or \notin or \subset or $\not\subset$)
 [d] The chord which passes through the centre of the circle is called
 (a diameter or a radius or a tangent or a side)

3 [a] Arrange ascendingly : $14\frac{1}{4}$, 15.025, 14.375 and $14\frac{1}{8}$

[b] From the opposite Venn diagram, write the following sets :

(1) X
 (2) $X \cup Y$
 (3) $X \cap Y$
 (4) $Y - X$



Math



4 [a] Draw the equilateral triangle ABC whose side length = 5 cm. , then draw $\overline{AD} \perp \overline{BC}$

[b] Find the area of the square whose side length is 5.02 m.. approximating the result to the nearest tenth.

5 [a] If the price of a piece of sweet is 2.5 pounds. What is the price of 25 pieces of the same kind ?

[b] A bag contains 5 white balls , 9 red balls and 6 black balls , all the balls are identical and equal in the size. If a ball is drawn randomly. What is the probability that the drawn ball is :

(1) Not white. (2) White or red.

Math

Answers Model Exam (1)

Question 1:

a- $128.7841 \simeq 128.784$
 b- $51.17 \simeq 51.2$
 c- $4.495 \div 2.8 = 44.950 \div 28 = 1.605 \simeq 1.61$
 d- $9.568 \div 9.2 = 95.68 \div 92 = 1.04 \simeq 1$
 e- $4.5 \times 9 = 40.5$
 f- between any two points on the circle
 g- $2.9 \text{ ton} \times 1000 = 2900 \text{ kg}$
 h- Functional lamps = $24 - 3 = 21$, so the probability of getting a functional lamp = $\frac{21}{24} = \frac{7}{8}$
 i- $X \cap Y = \{3\}$
 j- $254.0 \div 24 = 10.5 \simeq 11 \text{ days}$

Question 2:

A) Area = $L \times W$
 Length = area \div width
 $= 9.43 \div 2.45 = 943.000 \div 245 = 3.848 \simeq 3.85 \text{ cm}$

B)

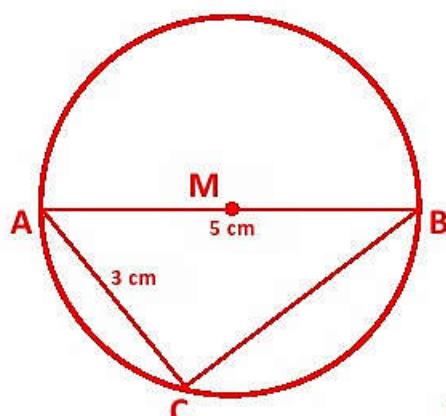
a- 0.1	\rightarrow	0.01
b- 29.189	$<$	39
c-	=	
d- 172.4489	$>$	0.17244

Question 3:

A) a- $\frac{1}{4}$
 b- First the probability of getting letter A = $\frac{1}{4}$, then the predicted number of getting letter A = $400 \times \frac{1}{4} = 100 \text{ times}$

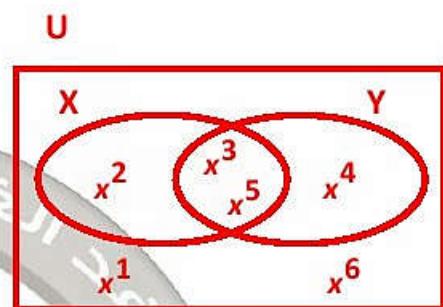
Math

B) $BC = 4 \text{ cm}$



Question 4:

A) a) {2, 3, 4, 5}
 b) {3, 5}
 c) {2}
 d) {1, 4, 6}



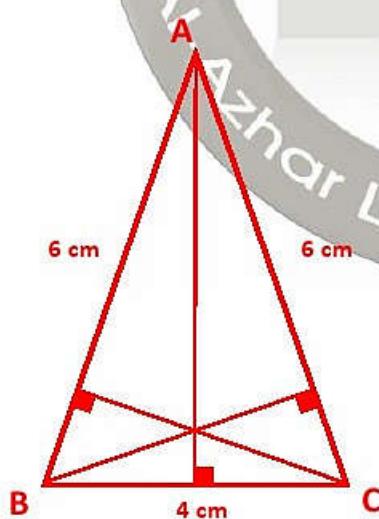
B) $58.62 \times 35.2 = 2063.424 \simeq 2063.42$

Question 5:

a- 2 b- Outside c- 0.76 d- X e- C

Question 6:

A)



B)

$$\text{a- } \frac{36}{100} = \frac{9}{25}$$

$$\text{b- } \frac{20}{100} = \frac{1}{5}$$

$$\text{c- } \frac{15}{100} = \frac{3}{20}$$

$$\text{d- } \frac{10}{100} = \frac{1}{10}$$

Model Exam (2)

Question 1:

a- $606.9765 \simeq 606.98$

b- $10.68 \simeq 10.7$

c- $1057.65 \simeq 1058$

d- $0.26625 \simeq 0.266$

e- $\frac{9}{2} \div \frac{5}{10} = \frac{9}{2} \times \frac{10}{5} = \frac{90 \div 10}{10 \div 10} = \frac{9}{1} = 9$

f- 5

g- $8.56 \text{ m} \div 1000 = 0.00856 \text{ km}$

$$\begin{array}{r}
 & & 10.68 \\
 & 152 & 1623.55 \\
 -152 & & \\
 \hline
 & & 1030 \\
 & & \times \\
 & & 0.15 \\
 & 8875 & \\
 \hline
 & 17750 & \\
 & 0.26625 & \\
 \hline
 & -1216 & \\
 & & R=19
 \end{array}$$

Question 2:

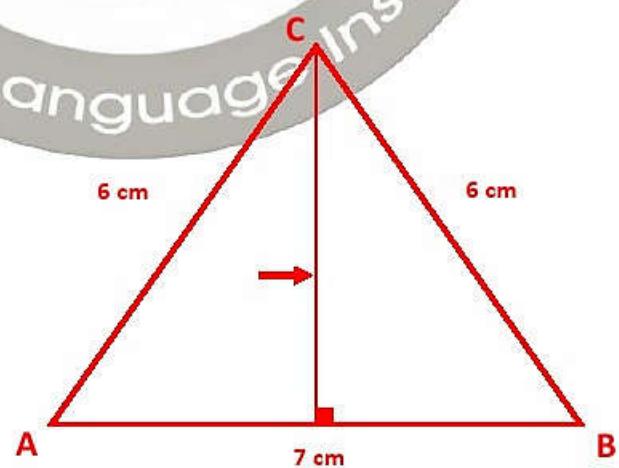
A)

a- The probability of getting an odd number $= \frac{5}{10} = \frac{1}{2}$

b- The probability of getting a prime number $= \frac{4}{10} = \frac{2}{5}$

c- The probability of getting an even number greater than 6 $= \frac{2}{10} = \frac{1}{5}$

B) Length of line segment = 5cm



Math

Question 3:

A) a) $X = 2$ and $Y = 1$
 b) Diameter
 c) The probability of success $= 1 - \frac{2}{15} = \frac{13}{15}$
 d) $72 \div 7 = 10.2 \approx 10$ weeks
 e) $X = 3$
 f) $\frac{9}{16} = 0.5625$, the difference $= 0.5734 - 0.5625 = 0.0109$

B) Area $= L \times W$

$$W = 10.25 \div 4.1 = 102.5 \div 41 = 2.5 \text{ m}$$

$$\begin{aligned} \text{Perimeter} &= (L + W) \times 2 \\ &= (4.1 + 2.5) \times 2 \\ &= 6.6 \times 2 = 13.2 \text{ m} \end{aligned}$$

$$\begin{array}{r} 002.5 \\ 41 \quad \boxed{102.5} \\ -82 \\ \hline 205 \\ -205 \\ \hline 00 \end{array}$$

Question 4:

A)

- a- $\{4, 8, 9, 1, 2, 3\}$
- b- $\{1, 2\}$
- c- $\{3\}$
- d- $\{3, 5\}$
- e- $\{5\}$

B) $\times 0.37 = 17.8932$

$$17.8932 \div 0.37 = 1789.32 \div 37 = 48.36$$

$$\begin{array}{r} 0048.36 \\ 37 \quad \boxed{1789.32} \\ -148 \\ \hline 309 \\ -296 \\ \hline 133 \\ -111 \\ \hline 222 \\ -222 \\ \hline 000 \end{array}$$

C)

- a- 3
- b- \subset
- c- $\frac{5}{2} \times \frac{2}{5} = 10$
- d- Chord
- e- 56.9865
- f- \emptyset

Math

Question 5:

A) $\frac{2}{6} = \frac{1}{3}$

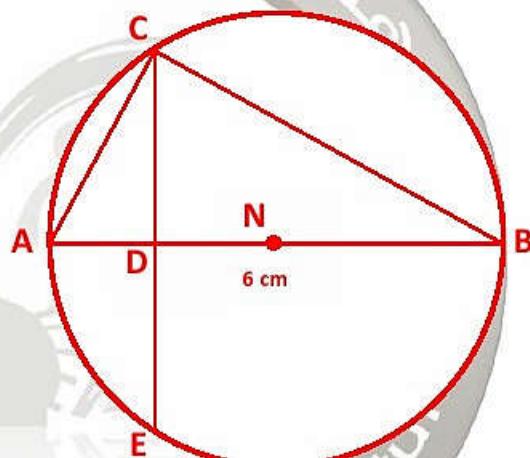
B)

- a- (✓)
- b- (✓)
- c- (✗)
- d- (✓)
- e- (✓)

Question 6:

A) $M(\angle ABC) = 90^\circ$

- a- Right angled triangle
- b- Chord
- c- C



B) $375 \div 0.5 + 5 \frac{1}{4} = 750 + 5 \frac{1}{4} = 755 \frac{1}{4}$

Math

Model Exam (3)

Question 1:

a- $753.2489 \simeq 753.249$
 b- $12460 \div 517 = 24.10 \simeq 24.1$
 c- $755.149 \simeq 755$
 d- $7.52 \div 3.15 = 2.3873 \simeq 2.39$

e- $\frac{17}{8} \div \frac{125}{1000} = \frac{17}{8} \times \frac{1000}{125} = 17$

f- $X = 4$
 g- Center
 h- $\frac{2}{5}$

Question 2:

A) Obtuse angled triangle
 Length = 2.5 cm



B)

a- $\frac{1}{6}$

b- The probability of getting letter A = $\frac{1}{6}$

So, the number of times are predicted to get letter A = $60 \times \frac{1}{6}$
 = 10 times

Math

Question 3:

A) Answer : 0.5 , 0.8 , 0.25 , 0.3

Arrange : 0.80 , 0.50 , 0.30 , 0.25

B) Area = $S \times S$

$$= 5.06 \times 5.06 = 506 \times 506 = 25.6036 \text{ m}^2 \simeq 25.60 \text{ m}^2$$

C)

a- \notin b- \subset c- \subset d- $\not\subset$ e- \in f- $\not\in$

Question 4:

A) The probability to be one of the printing group = $\frac{30}{120} = \frac{1}{4}$

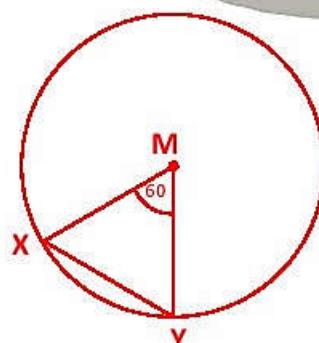
B) The number of times needed = $4375 \div 125 = 35$ times

Question 5:

A)

a- 7
 b- Diameter
 c- $<$
 d- \emptyset
 e- \notin
 f- One side = 6 cm , perimeter = $6 + 6 + 6 = 18$ cm

B) $XY = 2$ cm



Math

Model Exam (4)

1) Complete:-

- a) $4.576 \simeq 4.6$
- b) Y
- c) $\frac{7}{5}$
- d) $X = 5$

2) Choose:-

- a) \emptyset
- b) 10
- c) 3
- d) $12 \times \frac{3}{4} = 9$

3) Find:-

- 1) $1.356 \simeq 1.36$
- 2) $17.2 \simeq 17$
- 3) 4.1



b) Arrange in an ascending order:-

7.80, 7.75, 6.25, 6.40

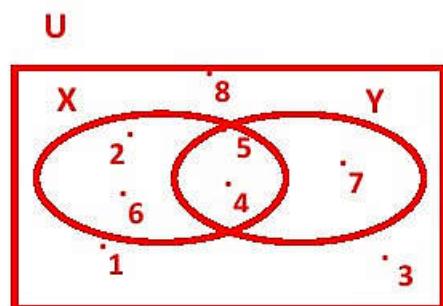
6.25, 6.40, 7.75, 7.80

Math

4)

a)

- 1) $X \cap Y = \{4, 5\}$
- 2) $X \cup Y = \{2, 4, 5, 6, 7\}$
- 3) $X - Y = \{2, 6\}$
- 4) $\bar{X} = \{1, 3, 7, 8\}$



b)

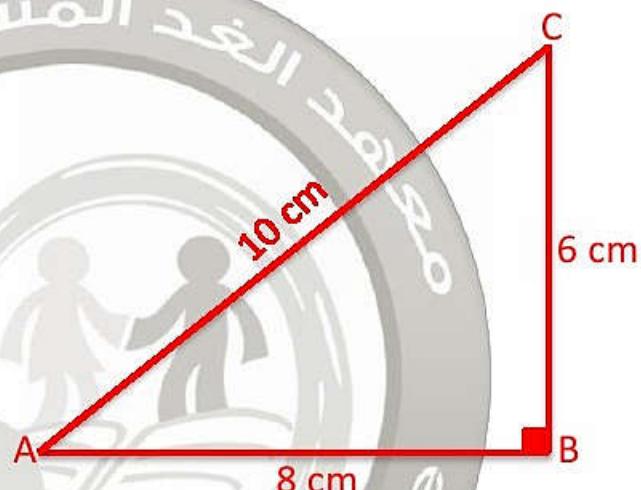
- 1) \in
- 2) \subset
- 3) \subset
- 5)
- a), ($\angle B$) = 90°

b) Complete:-

- 1) 0
- 2) 2
- 3)

a) $\frac{3 \div 3}{6 \div 3} = \frac{1}{2}$

b) $\frac{2 \div 2}{6 \div 2} = \frac{1}{3}$



Math

Model Exam (5)

1) Complete:-

- a) \subset
- b) Impossible
- c) $\frac{2 \div 2}{6 \div 2} = \frac{1}{3}$
- d) The vertex of the right angle.

2) Choose:-

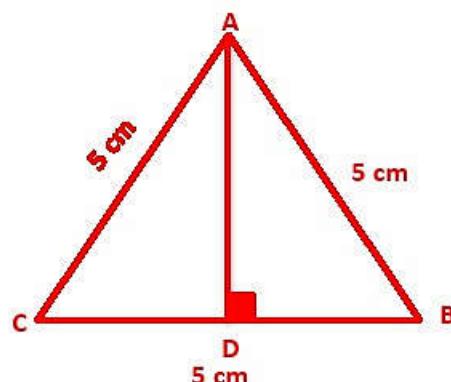
- a) 0.1
- b) $\frac{7^1}{2} \times \frac{12}{7^1} = \frac{12}{2} = 6$
- c) \notin
- d) a diameter.

3)

- a) 14.250, 15.025, 14.375, 14.125
14.125, 14.250, 14.375, 15.025
- b)
 - 1) $\hat{X} = \{3, 5, 7\}$
 - 2) $X \cup y = \{1, 2, 4, 5, 7\}$
 - 3) $X \cap y = \{2\}$
 - 4) $Y - X = \{5, 7\}$
- 4)

Math

a)



b) A of square = $S \times S$

$$= 5.02 \times 5.02$$

$$= 25.2004 \text{ m}^2$$

$$25.2004 \approx 25.2 \text{ m}^2$$

5)

a) The price = $2.5 \times 25 = 62.5$ pounds

b)

1) Not white = $\frac{15 \div 5}{20 \div 5} = \frac{3}{4}$

2) White or red = $\frac{14 \div 2}{20 \div 2} = \frac{7}{10}$

Good Luck

1] Choose the correct answer

A] $\{3\}$ $\{1, 3, 5\}$ [\in , \notin , \subset]

B] $135.42 \div 100 = \dots$ [13542 , 13.542 , 1.3542 , 135.42]

C] $\{1, 2\} \cup \{2, 3\} = \dots$ [$\{2\}$, $\{1, 3\}$, $\{1, 2, 3\}$, \emptyset]

D] $1\frac{1}{2} \div \frac{1}{4} = \dots$ [2.6 , 12 , $\frac{3}{8}$]

E] if the probability of success pupils is $\frac{8}{10}$ then the probability of the failure is [$\frac{1}{8}$, $\frac{3}{10}$, $\frac{1}{5}$, 1]

2] Complete to get the correct answer

A] if $6 \in \{3, 5, 2x\}$ then $x = \dots$ B] $2.5781 \approx \dots$ to the nearest hundredthC] When we draw a card from

1	2	3	4	5
---	---	---	---	---

 then the

probability of getting a prime number is

D] if $x \subset y$ then $x \cap y = \dots$

E] the longest chord in the circle is

3] A] if $U = \{a : a \text{ is a prime number smaller than } 15\}$

$$X = \{1, 3, 5\} \qquad Y = \{1, 5, 9, 12\}$$

** Represent them by using venn diagram

Find $X \cap Y$ $X - Y$ B] Find $23.49 \times 4.2 = \dots$ to the nearest hundredths4] if a container of oil contains 236.25 Kgm of oil it want to bottled

In a small bottles each of 0.75 kgm . Find the number of bottles ?

5] Draw a circle with radius length 3.5 cm . draw the diameter \overline{AB} take the point C \in to the circle . draw the triangle ABC then draw $\overline{CD} \perp \overline{AB}$. D \in \overline{AB} Find the length of \overline{CD}

6] A] Find the area of the rectangle whose dimensions are 15.5 m and 7.5 m

B] if a die tossed once calculate the probability of appearance

- 1] a number greater than 6
- 2] a number smaller than or equal 6
- 3] what is the name of each event ?

C] if 5 balls are red out of 40 balls then the number of red balls if the total number is 400 is

7] a bid barrel has 236.25 kgm of oil and we want to distribute the oil in small bottles the capacity of each is 0.75 kgm

How many bottles we needed?

Model test 2

Primary 5

1] complete to get correct statement

A] $\{ 2, 3, 6, 12 \} \cap$ the factors of the number 6 =

B] if $\{ 3, 5 \} = \{ 1+x, 3 \}$ then $x = \dots$

C] to draw a circle with diameter 7.2 cm we open the compasses ..

2] Find the result of

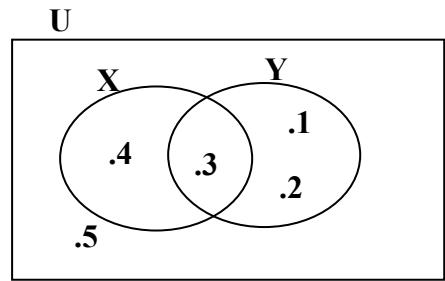
A] $4\frac{1}{2} \div 1.5 = \dots$ B] $\{ 2, 5, 8 \} - \{ 3, 5, 7 \} = \dots$

3] What is the number that if its multiplied by 0.5 the result will be 33.86

4] by using the opposite venn diagram complete

A] $X \cap Y$ B] $X \cup Y$

C] $X - Y$ D] X'



5] Draw the triangle ABC in which $AB = 6$ cm

$\angle B = 120^\circ$ then draw $\overline{AD} \perp \overline{BC}$ to cut it at D

Then find the length of \overline{AD}

6] A box contains 3 white balls, 7 red balls, 5 yellow balls. all have the same size if a ball was drawn randomly what is the probability that

A] the drawn ball is white

B] the drawn ball not red

7] Draw a circle M its radius length is 3 cm draw \overline{AB} diameter in it. state the points C, D, H such that $MC = 2$ cm, $MD = 5$ cm, $MH = 3$ cm

Then complete

A] \overline{MH} is called

B] \overline{AH} is called

C] the point D lie the circle

8] Choose the correct answer

A] $\{ 3, 7 \} \dots \{ 1, 3, 5, 7 \}$ [$\in, \notin, \subset, \subset$]

B] $355 \div 18 = 3.55 \div \dots$ [1.8, 18, 0.18, or 1800]

C] the probability of the impossible event is [1, 2, 0, Φ]

D] the smallest fraction is [$\frac{1}{3}, \frac{2}{5}, \frac{5}{8}, \frac{2}{9}$]

E] $1.25 \times 2.3 \dots 23 \times 12.5$ [$<, >, =$]

Model test 3
Primary 5

1] complete to get the correct statement

A] $\frac{7}{80} \approx \dots$ to the nearest hundredths

B] $\{1, 2, 3, 4\} \cap$ the set of prime numbers

C] the probability that Marwan win the match is $\frac{2}{3}$ then the probability of loss the match is

D] the longest chord in the circle is

E] X and Y are two sets $X \subset Y$ then $X \cap Y = \dots$ And $X \cup Y = \dots$

2] A box has 24 electric lamps 3 of them were bad if a lamp was drawn Randomly then the probability of drawn a good lamp is

3] Find the result

A] $178.15 - (9 \times 3.2) = \dots$ to the nearest tenths [$\frac{1}{10}$]

B] $(471.72 + 8.28) \div 1.5 = \dots$

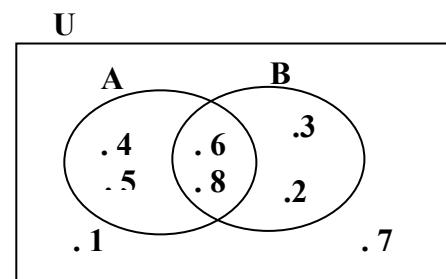
4] a man bought a T.V set for L.E 2000 , he paid 440 in cash , and divides The rest on equally monthly installments the value of each is 32.5 L.E Find the number of installments.

5] in the opposite venn diagram Complete

A] $A \cup B$

B] $A - B$

C] $(A \cup B)^\complement$



6] a family consumes 6.5 kg of meat monthly each of 38.5 L.E Calculate that the family paid to the nearest pound .

7] Draw the triangle ABC in which AB = 3 cm , BC = 4 cm and CA = 5cm Draw its altitudes then state the point of its intersection .

Question 1:**Answer The Following :**a) The Number $653.365 \cong 653.37$ to the nearest

10

b) $44 \dots \{21, 27, 444, 4\}$.c) $8645 \text{ cm} \cong \dots \text{ to nearest meter}.$ d) $4.517 \times \dots = 451.7$ e) if $\frac{x}{7} = \frac{12}{28}$, then $x = \dots$ f) $\{4, 5, 6\} \cup \{1, 3, 4, 7\} = \dots$ g) if A is a set and $A \subset U$, then $A \cap \bar{A} = \dots$

h) The Shaded part represents

i) In any triangle, there are heights.

j) $1\frac{1}{2} \div \frac{1}{4} = \dots$ **Question 2:****Choose the Correct answer from the parentheses:**

a) A circle of radius length 6 cm, then its diameter length = cm.

(6, 12, 3)

b) $43.791 \div 100 = \dots$ (to the nearest hundredth).

(0.43791, 0.43, 0.44)

c) The number of subsets of the set {4, 7} equals

(2, 4,)

d) 43 days $\cong \dots$ weeks. (to the nearest week).

(7, 6, 5)

e) $\frac{1}{3} \dots \frac{2}{5}$

(<, >, =)

f) The longest chord in a circle is called a

(radius, diameter, chord)

g) When tossing a coin once, the probability of getting a tail =

(0, 0.5, 1)

h) The smallest number from the following is

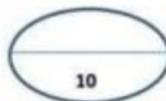
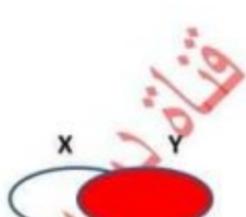
(0.111, 0.12, 1.023)

i) If $Y = \{2, 4, 6\} \cap \{1, 2, 3\}$, then $6 \dots Y$.(\in , \subset , \notin)j) $4\frac{1}{8} \times 2\frac{2}{3} = \dots$

(11, 10, 1)

Question 3:a) The quotient of dividing : $5.45 \div 0.5 = \dots$

b) If the price of one meter of cloth is L.E 3.25, what is the cost of 2.5 ??



c) An owner of packing food factory wanted to divide 5904 Kg . of sugar equally in 492 packs . What is the weight of each pack ?

d) Arrange the following numbers ascending order : 0.6 , $\frac{3}{8}$, $\frac{3}{4}$, 0.3 .

Question 4 :

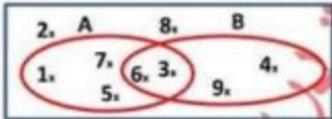
a) Use Venn Diagram to list the following sets :

1) $A \cap B = \dots$

U

2) $A \cup B = \dots$

3) $B - A = \dots$



4) $A - U = \dots$

5) $(A \cap B) = \dots$

6) $(A \cup B) = \dots$

b) Estimate of the result of : $14.7 \times 19.3 = \dots$

Question 5 :

a) A bag contains an amount of marbles of the same size and softness.

If 2 marbles are red , 3 marbles are blue and 5 marbles are white .

A marbles is selected randomly .

Calculate :

- The probability that the selected marbles is red .
- The probability that the selected marbles is blue .
- The probability that the selected marbles is not blue .
- The probability that the selected marbles is green .
- The probability that the selected marbles is blue or white .

b) Draw the triangle ABC where $AB=4$ cm , $BC=6$ cm , $CA=8$ cm .
then draw a circle its center is B and its radius length is 4 cm .

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الكلية	كلية علوم حاسوب ورياضيات بجامعة الازهر
المحافظة	دمياط
القناة	درس رياضه مع مسoster محمدى سامي
رقم التلفون	٠١٠١٤٠٧٤٥٩٦

لا تنسونا من دعمكم والاشتراك في القناة وتفعيل زر الجرس

Model Exam 1

First: - Choose the correct answer:

1) $\{4, 5\} \dots \{2, 3, 7\}$

a) \subset b) \subsetneq c) \in d) \notin

2) The number of altitudes of the acute angled- triangle is

a) zero b) 1 c) 2 d) 3

3) The probability of impossible event =

a) zero b) 1 c) 2 d) 3

4) 7 $\{17, 77\}$

a) \subset b) \subsetneq c) \in d) \notin

5) if $\{3, 4\} = \{1 + y, 4\}$, then $y = \dots$

6) $13542 \div 100 = \dots$

a) 13542

b) 13.542

c) 1.3542

d) 1354.2

7) The probability of success of a pupil in an exam is $\frac{4}{5}$ then the probability of his failing is

a) $\frac{1}{5}$

b) $\frac{1}{2}$

c) $\frac{2}{9}$

d) $\frac{1}{4}$

8) If $\{5, 3\} - \{3, x\} = \emptyset$ then $x = \dots$

a) zero

b) 1

c) 5

d) 3

9) If $X \subset Y$, then $X \cap Y = \dots$

a) X

b) Y

c) U

d) X^1

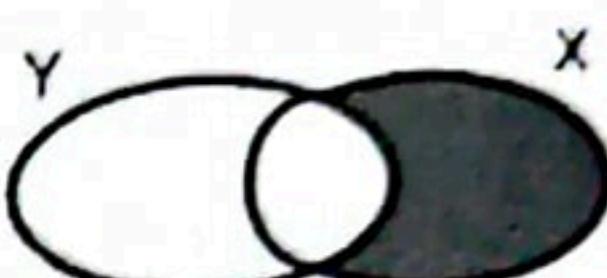
10) The shaded part in the opposite figure represents.....

a) $X \cup Y$

b) $X - Y$

c) U

d) $X \cap Y$



11) $2 \frac{1}{4} \times 1 \frac{2}{3} = \dots$

a) $4 \frac{1}{4}$

b) $3 \frac{3}{4}$

c) $3 \frac{7}{12}$

d) $2 \frac{2}{12}$

12) The probability of the certain event =

a) zero

b) 1

c) 2

d) 3

13) $\emptyset \dots$ the set of odd numbers.

a) \subset

b) \subsetneq

c) \in

d) \notin

14) If $X \subset Y$, then $X \cup Y = \dots$

a) X

b) Y

c) U

d) X^1

15) The altitudes of the obtuse – angled triangle intersect at one point located the triangle.

a) on

b) inside

c) outside

d) at the vertex

16) If $a \in X$, then $a \dots X^1$

a) \subset

b) \subsetneq

c) \in

d) \notin

17) A fair die is thrown once; the probability of getting a number divisible by 2 is

a) 0

b) $\frac{5}{6}$

c) $\frac{1}{3}$

d) $\frac{1}{2}$

18) As tossing a metallic coin once, the probability of appearing a tail is ...

a) 0

b) 1

c) $\frac{1}{3}$

d) $\frac{1}{2}$

19) A fair die is thrown once; the probability of getting a prime number is

a) 0

b) $\frac{5}{6}$

c) $\frac{1}{3}$

d) $\frac{1}{2}$

20) The longest chord the diameter in a circle

a) Longest

b) shortest

c) equal

d) different

21) $\frac{1}{2} \div 2 = \dots$

a) $\frac{1}{4}$

b) $\frac{1}{8}$

c) 2

d) $\frac{1}{2}$

22) The lengths of 2 diameters in the same circle are

a) Different

b) equal

c) approximately

d) smaller than

23) $37.53 \times 10 = \dots$

a) 375.3

b) 3.753

c) 0.3753

d) 375300

24) $4.559 \approx 4.56$ to the nearest

a) Tenths b) hundredths c) thousandths d) units

25) Any line segment joins any two points on the circle passing through the center of the circle is called

a) Radius

b) center

c) diameter

d) chord

26) The radius length of a circle with diameter 10 cm equal

a) 10

b) 5

c) 11

d) 7

27) $72.52 \times \dots = 7252$

a) 10

b) 100

c) 1000

d) 2000

28) $3\frac{1}{8} \approx \dots$ (to the nearest tenths)

a) 3.1

b) 3.12

c) 3.13

d) 3.125

29) To draw a circle with diameter length 20 cm. , then open the compass with length cm.

a) 5

b) 10

c) 12

d) 6

Second: - Complete the following:

1) Write the greatest decimal fraction which consists of 3, 5, 4 and 2, then approximate it to the nearest hundredth and to the nearest thousandth.

2) $16.4 \div 0.4 = \dots$

.....
.....
.....

3) The number which multiplied by 112, the result will be 3584 is

.....
.....
.....

4) $5.4 \times 3.2 = \dots$

.....
.....
.....

5) $\{8\} - \{2, 5, 8\} = \dots$

6) The altitudes of the right angled triangle intersects at the of the right angle.

7) The probability of an event = zero, then this is (a / an).....event.

8) The complement of an empty set is the set.

9) The number of sides of a triangle the number of its heights ($>$, $<$, $=$)

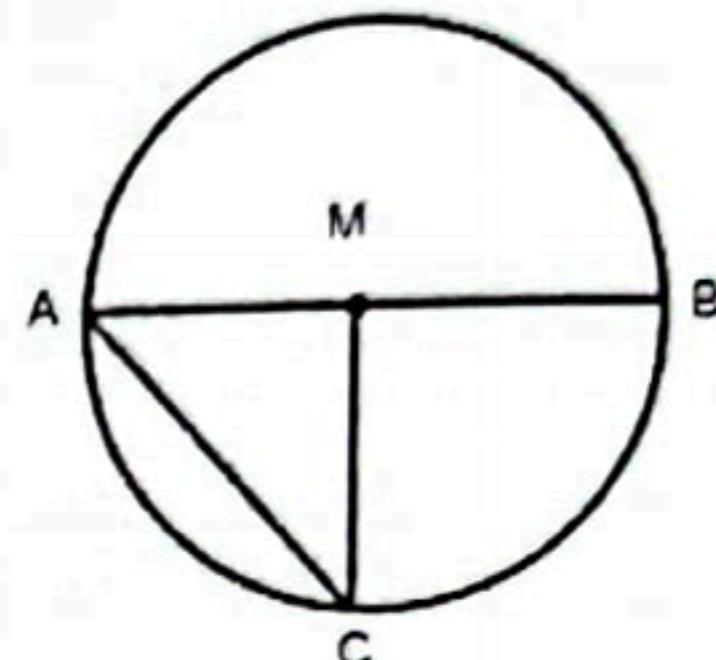
10) $6\frac{1}{4} \div 12\frac{1}{2} = \dots$

11) $4.2254 \approx \dots$ (to the nearest hundredth)

12) In the opposite figure:

i) AB is called in the circle M

ii) AC is called in the circle M



13) $478.347 - 134.834 = \dots \approx \dots$ (to the nearest hundredth)

.....

.....

14) $26.273 + 24.28 = \dots \approx \dots$ (to the nearest tenth)

.....

.....

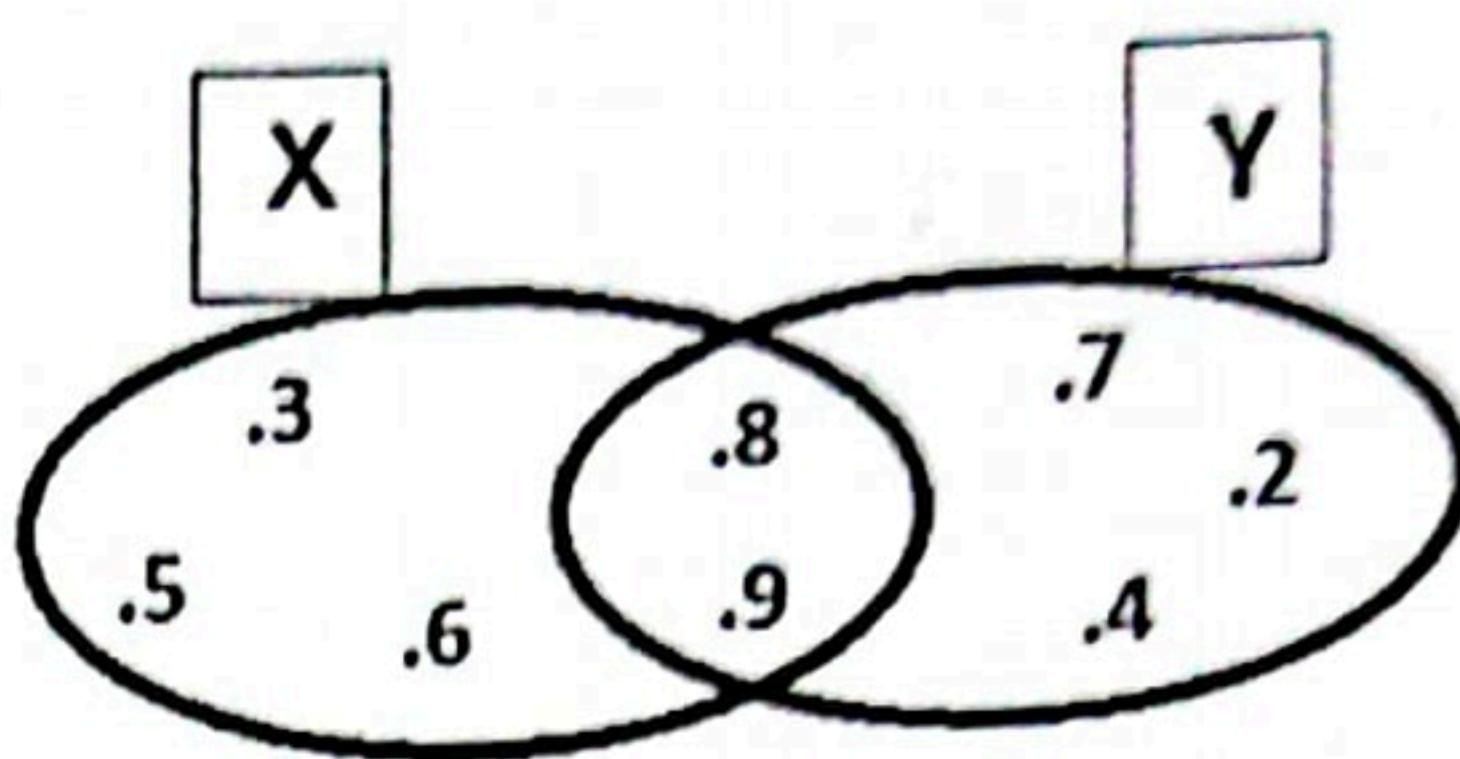
Third: - Answer the following :

A) From the opposite figure , Complete:

$$X = \dots \dots \dots \dots$$

$$Y = \dots \dots \dots \dots$$

$$X \cap Y = \dots \dots \dots \dots$$



$$X \cup Y = \dots \dots \dots \dots$$

$$X - Y = \dots \dots \dots \dots$$

$$X' = \dots \dots \dots \dots$$

B) Draw the Δ ABC in which $AB = 4$ cm, $BC = 6$ cm , and $CA = 8$ cm then draw a circle whose center is B and its radius length is equal to 4 cm then complete the following :

- The point A is located the circle
- The point C is located the circle
- The is called the radius of the circle.

6) A bag contains 4 red, 6 orange and 8 yellow marbles. Randomly a marble is Selected. Calculate the probability of selecting :

1. Red marbles =
2. Black marbles =
3. Yellow marbles =.....

Model Exam 1

First: - Choose the correct answer:

1) $\{4, 5\} \dots \{2, 3, 7\}$

a) \subset

b) \subsetneq

c) \in

d) \notin

2) The number of altitudes of the acute angled- triangle is

a) zero

b) 1

c) 2

d) 3

3) The probability of impossible event =

a) zero

b) 1

c) 2

d) 3

4) 7 $\{17, 77\}$

a) \subset

b) \subsetneq

c) \in

d) \notin

5) if $\{\underline{3}, \underline{4}\} = \{\underline{1+y}, \underline{4}\}$, then $y = \dots$

$$1+y = 3 \quad y = -2$$

6) $13542 \div 100$ \textcircled{b}

a) 13542

b) 13.542 \textcircled{b}

c) 1.3542

d) 1354.2

7) The probability of success of a pupil in an exam is $\frac{4}{5}$ then the probability of his failure is $\frac{1}{5}$

a) $\frac{1}{5}$ \textcircled{a}

b) $\frac{1}{2}$

c) $\frac{2}{9}$

d) $\frac{1}{4}$

8) If $\{5, 3\} - \{3, x\} = \emptyset$ then $x = \dots \textcircled{5}$

a) zero

b) 1

c) 5 \textcircled{c}

d) 3

9) If $X \subset Y$, then $X \cap Y = \dots \textcircled{X}$

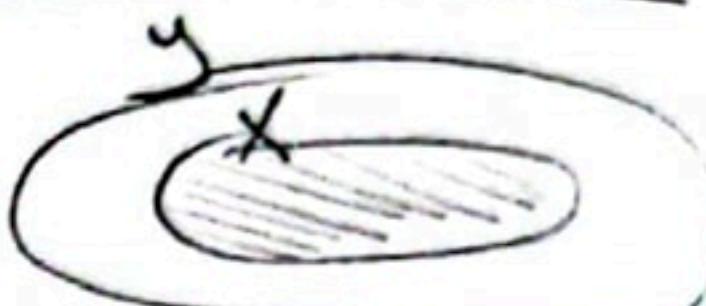
$X \cup Y = Y$

a) X \textcircled{a}

b) Y

c) U

d) X^1



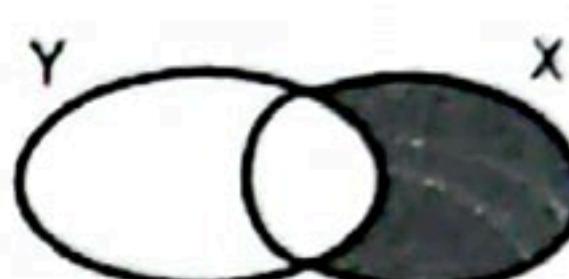
10) The shaded part in the opposite figure represents.....

a) $X \cup Y$

b) $X - Y$ \textcircled{b}

c) U

d) $X \cap Y$



11) $2 \frac{1}{4} \times 1 \frac{2}{3} = \dots \frac{9}{4} \times \frac{5}{3} = \frac{15}{4} = 3 \frac{3}{4}$

a) $4 \frac{1}{4} \textcircled{17/4}$

b) $3 \frac{3}{4} \textcircled{15/4}$

c) $3 \frac{7}{12}$

d) $2 \frac{2}{12}$

12) The probability of the certain event = $\text{certain} = \text{Sure}$

a) zero

b) 1 \textcircled{b}

c) 2

d) 3 = 1

13) \emptyset the set of odd numbers.

a) \subset \textcircled{a}

b) \subset

c) \in

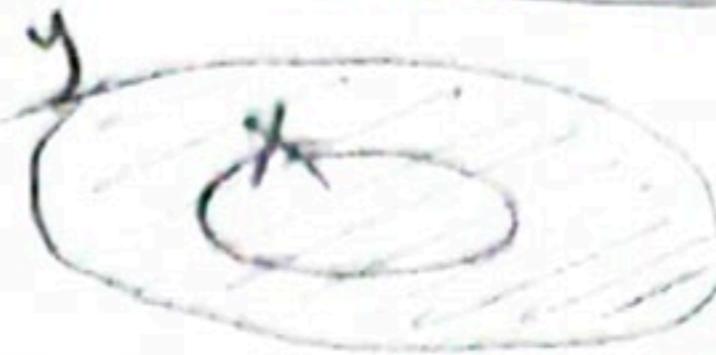
d) \in

\emptyset Sub set of any Set

$$x - y = \varnothing$$

$$x \cap y = x$$

14) If $X \subseteq Y$, then $X \cup Y = \dots, Y \dots$



a) X

b) Y

c) U

d) X

15) The altitudes of the obtuse - angled triangle intersect at one point located the triangle.

a) on

b) inside

c) outside

d) at the vertex

16) If $a \in X$, then $a \dots \dots \dots X$

a) \subset

b) $\not\subset$

c) \in

d) \notin

17) A fair die is thrown once; the probability of getting a number divisible by 2 is ... Even number

a) 0

b) $\frac{5}{6}$

c) $\frac{1}{3}$

d) $\frac{1}{2}$

tail, Even, odd, prime = $\frac{1}{2}$

18) As tossing a metallic coin once, the probability of appearing a tail is ...

a) 0

b) 1

c) $\frac{1}{3}$

d) $\frac{1}{2}$

19) A fair die is thrown once; the probability of getting a prime number is

a) 0

b) $\frac{5}{6}$

c) $\frac{1}{3}$

d) $\frac{1}{2}$

20) The longest chord the diameter in a circle

a) Longest

b) shortest

c) equal

d) different

$$21) \frac{1}{2} \div \frac{2}{1} = \frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$$

a) $\frac{1}{4}$

b) $\frac{1}{8}$

c) 2

d) $\frac{1}{2}$

22) The lengths of 2 diameters in the same circle are

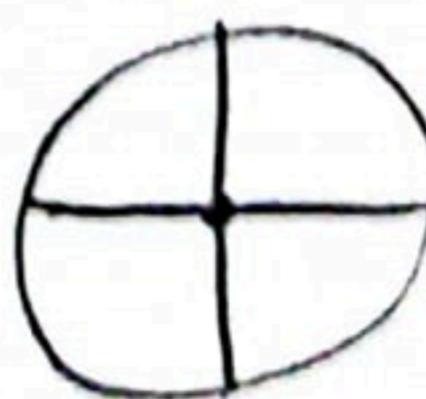
a) Different

b) equal

c) approximately

d) smaller than

diameters are equal
radii are equal



23) $37.53 \times 10 = \dots$
a) 375.3 b) 3.753 c) 0.3753 d) 375300

24) $4.559 \approx 4.56$ to the nearest
a) Tenths b) hundredths c) thousandths d) units

25) Any line segment joins any two points on the circle passing through the center of the circle is called
a) Radius b) center c) diameter d) chord

26) The radius length of a circle with diameter 10 cm equal
a) 10 b) 5 c) 11 d) 7

27) $72.52 \times \dots = 7252$
a) 10 b) 100 c) 1000 d) 2000

28) $3\frac{1}{8} \approx \dots$ (to the nearest tenths) $\frac{1}{8} = 0.125$ $\frac{1}{2} = 0.5$
a) 3.1 b) 3.12 c) 3.13 d) 3.125

29) To draw a circle with diameter length 20 cm., then open the compass with length cm. *Radius*

a) 5 b) 10 c) 12 d) 6

Second: - Complete the following:

1) Write the greatest decimal fraction which consists of 3, 5, 4 and 2, then approximate it to the nearest hundredth and to the nearest thousandth. *decimal is 0.5432*

hundredths = 0.54

thousandth = ¹⁶⁰0.543

2) $16.4 \div 0.4 = \dots 41$

$16.4 \div 4 = 4.1$

$$\begin{array}{r}
 \times 4 \\
 \hline
 1 \boxed{4} \\
 \hline
 2 \dots 8 \\
 \hline
 3 \boxed{1} \\
 \hline
 4 \boxed{1} \\
 \hline
 5 \boxed{2} \quad 0 \\
 \hline
 0 \dots 0
 \end{array}
 \quad
 \begin{array}{r}
 41 \\
 \hline
 4 \quad \boxed{1} \\
 \hline
 16 \quad 4 \\
 \hline
 16 \quad 4 \\
 \hline
 0 \dots 0
 \end{array}$$

3) The number which multiplied by 112, the result will be 3584 is 32

$$\begin{array}{r}
 \times 112 = 3584 \\
 \hline
 112 \\
 \hline
 3584
 \end{array}
 \quad
 \begin{array}{r}
 32 \\
 \hline
 3584
 \end{array}$$

$$\begin{array}{r}
 3584 \div 112 = 32 \\
 \hline
 112 \\
 \hline
 336 \\
 \hline
 224 \\
 \hline
 224 \\
 \hline
 0
 \end{array}
 \quad
 \begin{array}{r}
 32 \\
 \hline
 3584 \\
 \hline
 336 \\
 \hline
 224 \\
 \hline
 224 \\
 \hline
 0
 \end{array}$$

the number is 32

4) $5.4 \times 3.2 = \dots 17.28$

$$\begin{array}{r}
 54 \\
 \times 32 \\
 \hline
 108 \\
 + 1620 \\
 \hline
 1728
 \end{array}
 \quad
 \begin{array}{r}
 17.28 \\
 \hline
 17.28
 \end{array}$$

5) $\{8\} - \{2, 5, 8\} = \dots \cancel{8}$ in 3W1 unit $\Rightarrow 10$

6) The altitudes of the right angled triangle intersects at the vertex of the right angle.

acute \rightarrow inside

obtuse \rightarrow outside



7) The probability of an event = zero, then this is (a / an) impossible event.

Certain = Sure = 1

Impossible = 0

Possible = $0 \xrightarrow{161} 1$ 0.5, 0.3, $\frac{1}{4}$

8) The complement of an empty set is the ~~empty~~ set.

$$\emptyset' = U$$

9) The number of sides of a triangle ~~is~~ ³ the number of its heights ($>$, $<$, $=$) ~~altitudes~~

$$U' = \emptyset$$

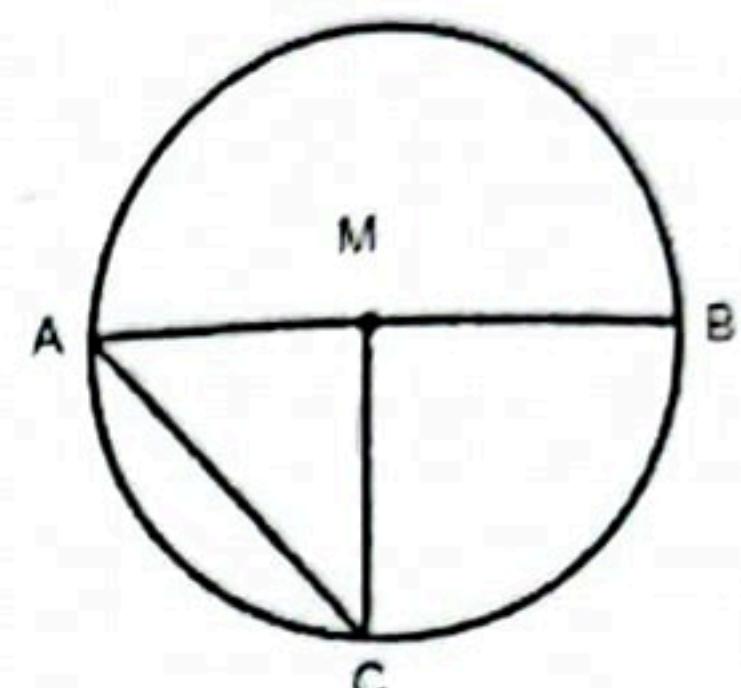
$$10) 6\frac{1}{4} \div 12\frac{1}{2} = \frac{25}{4} \div \frac{25}{2} = \frac{25}{2} \times \frac{2}{25} = \frac{1}{2}$$

$$11) 4.2254 \approx 4.23 \quad (\text{to the nearest hundredth})$$

12) In the opposite figure:

i) AB is called diameter in the circle M

ii) AC is called chord in the circle M



$$13) 478.347 - 134.834 = 343.513 \quad (\text{to the nearest hundredth})$$

$$\begin{array}{r} 478.347 \\ - 134.834 \\ \hline 343.513 \end{array} \quad \approx 343.51$$

$$14) 26.273 + 24.28 = 50.553 \approx 50.6 \quad (\text{to the nearest tenth})$$

$$\begin{array}{r} 26.273 \\ + 24.28 \\ \hline 50.553 \end{array} \quad \approx 50.6$$

Third: - Answer the following :

A) From the opposite figure , Complete:

$$X = \{5, 3, 1, 6, 8, 9, \dots\}$$

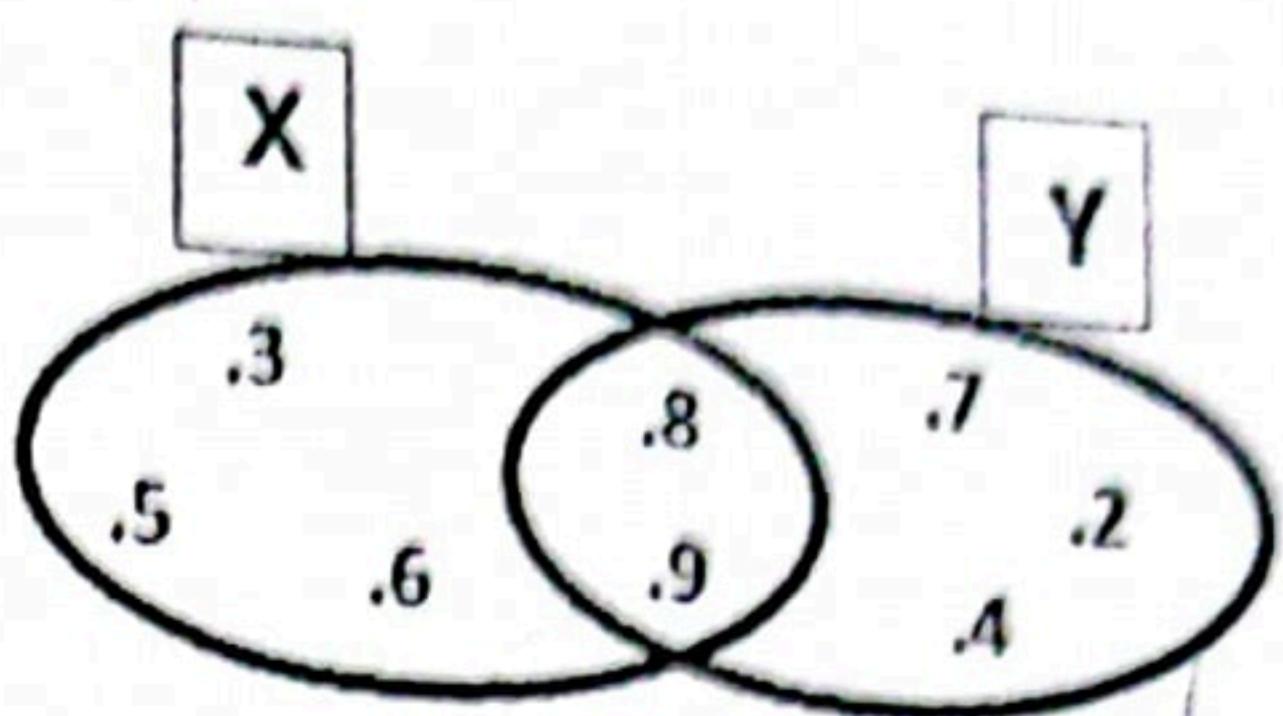
$$Y = \{8, 9, 7, 2, 4, \dots\}$$

$$X \cap Y = \{8, 9\}$$

$$X \cup Y = \{3, 6, 5, 8, 9, 7, 2, 4\}$$

$$X - Y = \{3, 5, 6, 7\}$$

$$X = \{7, 2, 4\}$$



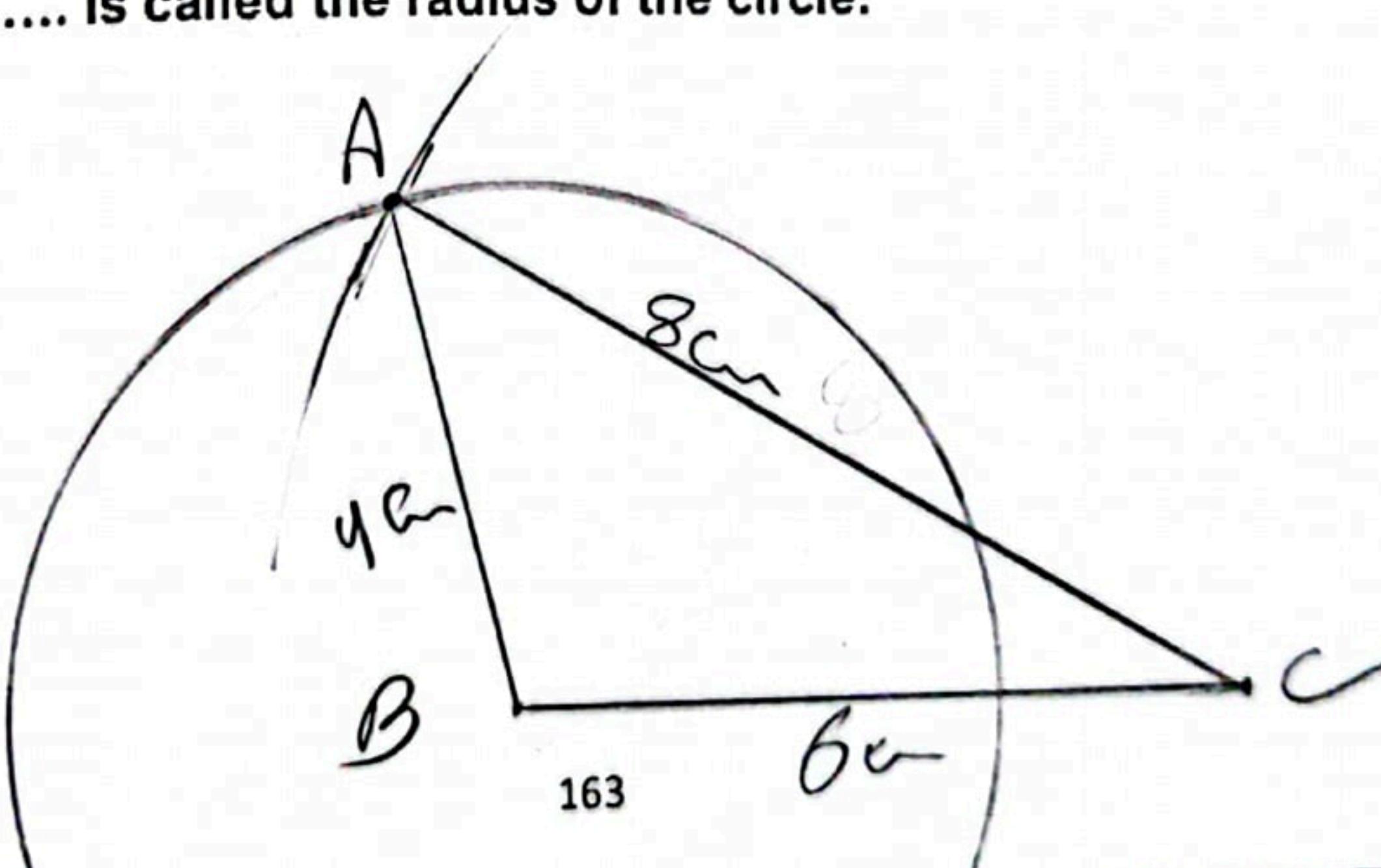
B) Draw the $\triangle ABC$ in which $AB = 4 \text{ cm}$, $BC = 6 \text{ cm}$, and

$CA = 8 \text{ cm}$ then draw a circle whose center is B and its radius length is equal to 4 cm then complete the following :

a) The point A is located ... on the circle

b) The point C is located out side the circle

c) The BA is called the radius of the circle.



$$4+6+8=18$$

6) A bag contains 4 red, 6 orange and 8 yellow marbles. Randomly a marble is Selected. Calculate the probability of selecting :

1. Red marbles = $\frac{4}{18} = \frac{2}{9}$

2. Black marbles = 0

3. Yellow marbles = $\frac{8}{18} = \frac{4}{9}$